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CATALOGUE

OF THE

SPECIMENS

OF

DERMAPTERA SALTATORIA

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

PART V.

BY

FRANCIS WALKER, F.L.S., &c.

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PREFACE.

The object of the present Catalogue is to give a complete List of all the genera and species of Dermaptera Saltatoria known to exist in the collections of European and American Entomologists. The letters *a*, *b*, *c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained; and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

J. E. GRAY.

British Museum,
May 1*st*., 1871.

CATALOGUE

OF

DERMAPTERA SALTATORIA.

PART V.

Fam. 8. TETTIGIDÆ.

Tetridides, *Ramb. Faun. And.*—Tetricidites, *Serv. Orth.* 754.

Genus 1. TETTIX.

Gryllus (Bulla), *Linn.*—Acrydium, *Fabr.*, *Geoffr.*, *Oliv.*, *Deg.*, *Thunb. Zett.*, *Phil.*—Tetrix, *Latr.*, *Burm.*, *Serv.*, *Charp.* (*Hor. Ent.*)—Tettix, *Fisch de W. Orth. Ross. Fieb.* (*Kelch.*) *Fisch. Orth. Eur.* 419—Peritrachelia, *Fieb. Ent. Mon.*—Platyparyphea, *Fieb.* (*Kelch. Orth. Obeschl.*)

Europe.

1. Tettix subulata.

——, *Schäff, Icon. Ins. Rat.* ii. pl. 154, f. 9, 10; pl. 161, f. 2, 3. *Deg. Ins.* iii. 314, pl. 23, f. 17—Gryllus (Bulla) subulatus, *Linn. Syst. Nat.* i. 2, 693—Acrydium subulatum, *Fabr. Ent. Syst.* ii. 26. *Herbst, Fuessly, Arch.* 190, pl. 52, f. 4. *Latr. Hist. Nat.* xii. 164, pl. 95, f. 4. *Zett. Orth. Suec.* 106. *Steph. Ill. Mand.* vi. 34. *Curt. Brit. Ent.* x. pl. 439. *Cuv. R. Anim.* 3*me Ed.* pl. 86, f. 4—Acrydium pallescens, *Zett. Orth. Suec.*—Acrydium marginatum, *Zett. Orth. Suec.*—Acrydium humerale, *Zett. Orth. Suec.*—Acrydium dorsale, *Zett. Orth. Suec.*—Acrydium bimaculatum, *Zett. Orth. Suec.*—Acridium subulatum, *Zett. Ins. Lapp.* 250—Acridium fuliginosum, *Zett. Ins. Lapp.* 250—Tetrix subulata, *Burm. Handb. Ent.* ii. 659. *Serv. Hist. Orth.* 761. *Fisch. de W. Orth. Ross.* 349, pl. 18, f. 1—4. *Fieb. Ent. Mon.* 131, pl. 10, f. 12. *De Borck, Rätv. Ins.* 138, pl. 4, f. 8—Acrydium bipunctatum, *Panz. Faun. Ins. Germ.* 5, pl. 18. *Costa, Faun. R. Nap.* pl. 1, f. 5—Tetrix meridionalis, *Ramb. Faun. And.* 65. *Costa, Faun. R. Nap.* pl. 1, f. 3—Tettix subulata, *Fisch. Orth. Eur.* 421, pl. 18, f. 17, 18—Tettix nutans, *Hagenb. Fisch. Orth. Eur.* pl. 18, f. 19.

a—l. England. From Mr. Stephens' collection.
m—z. England.
aa—dd. France. From Prof. Westwood's collection.

Egypt.

2. Tettix depressa.

Tetrix depressa, *Briss. Barn. A. S. E. F.* vi. 424. *Costa, Faun. R. Nap.* pl. 1, f. 4—Tettix depressa, *Fisch. Orth. Eur.* 424, pl. 18, f. 20.

a—c. France. From Prof. Westwood's collection.

3. Tettix bipunctata.

Gryllus (Bulla) bipunctatus, *Linn. Syst. Nat.* i. 2, 693. *Sulz. Abg. Gesch. Ins.* 82, pl. 8, f. 6—Acrydium scutellatum, *Deg. Ins.* iii. 313, pl. 23, f. 15—Acrydium bipunctatum, *Fabr. Ent. Syst.* ii. 26. *Latr. Hist. Nat.* xii. 164. *Herbst, Fuessly, Arch.* 189, pl. 52, f. 2. *Zett. Orth. Suec.* 115; *Ins. Lapp.* 251. *Steph. Ill. Mand.* vi. 34—Acrydium bifasciatum, *Herbst, Fuessly, Arch.* pl. 52, f. 2—Acrydium laterale, *Zett. Orth. Suec.*—Acrydium binotatum, *Zett. Orth. Suec.*—Acrydium vittatum, *Zett. Orth. Suec.*—Acrydium zonatum, *Zett. Orth. Suec.*—Acrydium obscurum, *Zett. Orth. Suec.*—Acrydium ochraceum, *Zett. Orth. Suec.*—Acrydium hieroglyphicum, *Zett. Orth. Suec.*—Acrydium scriptum, *Zett. Orth. Suec*—Acrydium variegatum, *Zett. Orth. Suec.*—Acrydium hilare, *Zett. Ins. Lapp.*—Acrydium ephippium, *Zett. Ins. Lapp.*—Acrydium carbonarium, *Zett. Ins. Lapp.*—Tetrix bipunctata, *Burm. Handb. Ent.* ii. 660. *Serv. Hist. Orth.* 765. *Fisch. de W. Orth. Ross.* 351, pl. 18, f. 5, 6. *Fieb. Ent. Mon.* 133, pl. 10, f. 14—16. *De Borck, Rätv. Ins.* 140—Tetrix obscura, *Hagenb. Symb.* 42, f. 26—Tettix bipunctata, *Fisch. Orth. Eur* 425, pl. 18, f. 21.

a—l. England. From Mr. Stephens' collection.
m—z. England.
aa—bb. France. From Prof. Westwood's collection.

4. Tettix Schrankii.

Gryllus xyphothyreus? *Schr. Ins. Austr.* i. 243—Acridium cristatum? *Thunb. Nov. Act. Upsal.* vii. 159. *Zett. Orth. Suec.* 121—Tetrix bipunctata, *var.* zonata, ochracea, coronata, ephippium, *Fisch. de W. Orth. Ross.* 352, pl. 18, f. 7—10—Tetrix bipunctata, *Costa, Faun. R. Nap.* pl. 1, f. 2—Tetrix Schrankii, *Fieb. Ent. Mon.* 130, pl. 10, f. 17—19—Tettix Schrankii, *Fisch. Orth. Eur.* 427, pl. 18, f. 22.

Europe.

5. Tettix brachyptera.

Tetrix brachyptera, *Lucas, A. S. E. F. 2me Ser.* ix. 382—uncinata, *Lucas.*

Algeria.

North America.

5. Tettix granulata.

Acrydium granulatum, *Kirby, Faun. Bor. Amer.* 251—Tettix granulata, *White, Rich. Arct. Search Exp.* ii. 360—Tettix granulata, *Scudder, Can. Nat.* vii. 288. *Bost. Journ. Nat. Hist.* vii. 474.

a, b. Arctic America. Presented by Sir J. Richardson.
c, d. Hudson's Bay. Presented by Dr. Barnston.
e, f. Lake Huron. From Dr. Bigsby's collection.

6. Tettix ornata.

ornata, *Harris*, *Hitch. Rep. 2nd Ed.* 577; *Treat. Ed.* 1841, 150; *Ed.* 1852, 162; *Ed.* 1862, 186. *Fitch*, *Amer. Journ. Agr. and Sc.* vi. 146. *Scudder*, *Bost. Journ. Nat. Hist.* vii. 474.

a. Indiana. Presented by F. Walker, Esq.
b. Illinois. Presented by F. Walker, Esq.
c—h. Nova Scotia. From Lieut. Redman's collection.
i. Hudson's Bay. Presented by Dr. Barnston.

7. Tettix lateralis.

lateralis, *Harris*, *Hitch. Rep.* 583; *2nd Ed.* 577; *Treat. Ed.* 1841, 151; *Ed.* 1852, 163; *Ed.* 1862, 187.

a, *b*. New York. Presented by E. Doubleday, Esq.
c—e. Florida. Presented by E. Doubleday, Esq.
f, *g*. United States. Presented by F. Walker, Esq.
h. North America. Presented by the Entomological Club.

8. Tettix arenosa.

Tetrix arenosa, *Burm. Handb. Ent.* ii. 659.

South Carolina.

9. Tettix polymorpha.

Tetrix polymorpha, *Burm. Handb. Ent.* ii. 659.

South Carolina.

10. Tettix cucullata.

Tetrix cucullata, *Burm. Handb. Ent.* ii. 658—Tettix cucullata, *Scudder*, *Bost. Journ. Nat. Hist.* vii. 475.

South Carolina. Massachusetts. Missouri.

11. Tettix oxycephala.

Tetrix oxycephala, *Burm. Handb. Ent.* ii. 659.

South Carolina.

12. Tettix bilineata.

bilineata, *Harris*, *Treat. Ed.* 1841, 151; *Ed.* 1852, 162; *Ed.* 1862, 186.

Massachusetts.

13. Tettix cristata.

cristata, *Pack. Rep. Nat. Hist. Maine*, 1861, 375.

Maine.

14. Tettix dorsalis.

dorsalis, *Harris*, *Treat. Ed.* 1841, 151; *Ed.* 1852, 162; *Ed.* 1862, 186. *Fitch*, *Amer. Journ. Agric. and Sci.* vi. 146.

New York. Massachusetts.

15. Tettix Harrisii.

Harrisii, *Pack. Rep. Nat. Hist. Maine*, 1861, 376.

Maine.

16. Tettix parvipennis.

parvipennis, *Harris*, *Hitch. Rep* 583; *2nd Ed.* 577; *Treat. Ed.* 1841, 152; *Ed.* 1852, 163; *Ed.* 1862, 187, f. 82.

Massachusetts.

17. Tettix quadrimaculata.

quadrimaculata, *Harris*, *Treat. Ed.* 1841, 151; *Ed.* 1852, 162; *Ed.* 1862, 186.

Massachusetts.

18. Tettix rugosa.

rugosa, *Scudder*, *Bost. Journ. Nat. Hist.* vii. 476.

North Florida.

19. Tettix sordida.

sordida, *Harris*, *Hitch. Rep.* 2*nd Ed.* 577; *Treat. Ed.* 1841, 151; *Ed.* 1852, 162; *Ed.* 1862, 187.

Massachusetts.

20. Tettix triangularis.

triangularis, *Scudder*, *Bost. Journ. Nat. Hist.* vii. 475.

Massachusetts. Maine. New Hampshire.

21. Tettix purpurascens.

Tetrix purpurascens, *Serv. Ann. Sci. Nat.* xxii. 291.

Trinity Island.

Mexico.

22. Tettix Mexicana.

Mexicana, *Sauss. Rev. Zool.* xiii. 328.

Mexico.

23. Tettix Chichimeca.

Chichimeca, *Sauss. Rev. Zool.* xiii. 329.

Mexico.

24. Tettix Azteca.

Azteca, *Sauss. Rev. Zool.* xiii. 329.

Mexico.

25. Tettix Tolteca.

Tolteca, *Sauss. Rev. Zool.* xiii. 329.

Mexico.

South America.

26. Tettix cnemidota.

Tetrix cnemidota, *Burm. Handb. Ent.* ii. 659.

a—c. Ega. From Mr. Bates' collection.
d. Para. From Mr. Bates' collection.
e. Para. From Mr. Wallace's collection.
f. St. Paul. From Mr. Bates' collection.

27. Tettix mucronata.

Tetrix mucronata, *Enc. Meth.* x. 600—Tetrix (Batrachidea) mucronata, *Serv. Hist. Orth.* 764, pl. 13, f. 5.

Brazil.

28. Tettix caudata.

caudata, *Sauss. Rev. Zool.* xiii. 328.

Guyana.

29. Tettix bispina.

bispina, *Sauss. Rev. Zool.* xiii. 330.

Bahia, Brazil.

30. Tettix miserabilis.

miserabilis, *Blanch, Gay, Chili*, vi. 85, pl. 3, f. 10.

Chili.

31. Tettix spinifrons.

spinifrons, *Stal, Eug. Resa*, 346.

Rio Janeiro.

Var.? Fœm. *Picea*, T. hastatæ *affinis*, *minus gracilis*, *fastigii spina longiore*; *pedes fulvi*, *tibiis fusco fasciatis*; *alæ posticæ diaphanæ*, *vitta costali fusca*, *margine exteriore fuscescente*.

Female. Piceous, a little shorter than T. hastata; tip of the vertex forming a longer spine. Front of the head and prothorax in structure like those of T. hastata. Spine of the prothorax extending for full half its length beyond the tip of the abdomen. Legs tawny; tibiæ with brown bands. Fore wings rudimentary. Hind wings pellucid, with a brown costal stripe and with a brownish festooned exterior border; veins black. Length of the body 6½ lines; expansion of the fore wings 11 lines.

a. Para. From Mr. Bates' collection.

32. Tettix lobulata.

lobulata, *Stal, Eug. Resa*, 347.

Rio Janeiro.

33. Tettix hastata.

Mas. *Picea, gracillima; vertex subcarinatus, fastigio unispinoso; frons fulva, carinis quatuor abbreviatis unaque anteriore furcata; prothorax subtricarinatus, antice subtuberculatus laminis duabus lateralibus, postice lanceolatus, abdominis apicem longissime superans; pedes fulvi, tibiis quatuor anterioribus fusco fasciatis; alæ posticæ diaphanæ, vitta costali margineque exteriore nigricantibus.*

Male. Piceous, very slender. Head and prothorax with a slight keel. Head much narrower than the prothorax; tip of the vertex forming a short spine; front tawny, with four short keels and with an anterior keel which is furcate towards the face. Prothorax lanceolate hindward and extending for two-thirds of its length beyond the tip of the abdomen; two slight lateral keels, which diverge from the fore border to the base of the fore wings and converge from thence to the tip; fore part slightly tuberculate and with the usual transverse impressed lines. Pectus and legs tawny; four anterior tibiæ with brown bands. Fore wings rudimentary. Hind wings pellucid, ample, with a blackish costal stripe and with a blackish tinge along the festooned exterior border; veins black. Length of the body 7 lines; expansion of the hind wings 12½ lines.

It is much more slender than T. cnemidota, and the appendage on each side of the prothorax is much smaller.

a. Demerara.

34. Tettix attenuata.

Fœm. *Picea, gracillima, subtus fulva; fastigium acute spinosum; frons carinis quatuor abbreviatis unaque anteriore furcata; antennæ testaceo fasciatæ; prothorax subtricarinatus, antice subrugulosus, laminis duabus lateralibus, postice lanceolatus, abdomen longissime superans; pedes fulvi, femoribus fusco variis, tibiis quatuor anterioribus fusco fasciatis; alæ posticæ cinereæ, costa nigricante.*

Female. Piceous, very slender, tawny beneath. Head much narrower than the prothorax; tip of the vertex forming a small acute spine; front with four short keels and with an anterior middle forked keel. Eyes very prominent. Antennæ very slender, testaceous at the base and with a few testaceous bands. Prothorax with three slight keels, which diverge from the fore border to the base of the fore wings and converge from thence to the tip; fore part slightly rugulose, with the usual transverse impressed lines; hind part lanceolate, compressed, extending for about two-thirds of its length beyond the tip of the abdomen. Legs tawny; femora partly brown; four anterior tibiæ with brown bands. Fore wings rudimentary.

Hind wings cinereous, pellucid, blackish along the costa; veins black. Length of the body 5½ lines; expansion of the hind wings 9 lines.

It much resembles T. hastata, but is rather more slender; it is also allied to T. caudata, but the prothorax is not thrice longer than the hind femora.

a. Santarem. From Mr. Bates' collection.

35. Tettix ruficornis.

Fœm. *Picea, unicarinata; caput inter antennas fulvum bicarinatum; frons tricarinata, carina intermedia furcata; antennæ rufæ, gracillimæ; prothorax subtuberculatus, carinis lateralibus interruptis, postice lanceolatus abdomen superans; pedes sat robusti, tibiis quatuor anterioribus fulvo trifasciatis, tibiis tarsisque posticis fulvis; alæ posticæ diaphanæ, vitta costali cervina, margine exteriore fuscescente.*

Female. Piceous. Head and prothorax with a slight keel. Head tawny between the antennæ; tip of the vertex not prominent; two short keels between the antennæ, and three anterior keels, of which the middle one is furcate towards the face, the lateral pair are curved outward. Eyes slightly prominent. Antennæ red, very slender. Prothorax minutely tuberculate, with two slight lateral keels, which are dislocated in the fore part and converge from the base of the fore wings to the tip; transverse impressed lines as usual; hind part lanceolate, slightly compressed, extending rather beyond the abdomen and the hind femora. Legs rather stout; four anterior tibiæ with three tawny bands; hind tibiæ and hind tarsi tawny. Fore wings rudimentary. Hind wings ample, pellucid, with a fawn-coloured costal stripe; exterior border festooned, tinged with brown; veins black. Length of the body 7 lines; expansion of the hind wings 11 lines.

The prothorax has no lateral appendages, and thereby this one differs from all the preceding South American species of the genus.

a. Santarem. From Mr. Bates' collection.

36. Tettix maura.

Mas. *Nigra, sat robusta; palpi albi, clavati; prothorax subrugulosus, margine antico acute angulato verticem superante, carina bene determinata, postice lanceolatus abdomen longe superans; tarsi postice albo bifasciati; alæ posticæ nigricantes.*

Male. Black, moderately stout. Head and prothorax with a well-defined keel. Head very short, much narrower than the prothorax; the keel continued to the tip of the vertex and there parted into two keels between the antennæ; an anterior keel forked towards the face. Eyes white, prominent. Palpi white, clavate. Antennæ very slender. Prothorax slightly rugulose; fore border acutely angular, projecting between the eyes; two lateral keels diverging from the first transverse impressed line to the base of the fore wing, converging from thence to the tip; hind

part lanceolate, extending much beyond the hind femora and more beyond the abdomen. Hind femora stout; hind tarsi with two white bands. Hind wings blackish. Length of the body 5 lines.

a. Brazil.

37. Tettix zonata.

Fœm. *Nigricans, robusta; fastigium subconicum, bicarinatum; carina frontalis furcata; antennæ gracillimæ, fulvo fasciatæ; prothorax tuberculatus, tricarinatus, luteo late unifasciatus, lateribus angulatim dilatatis luteo uniplagiatis, postice lanceolatus abdomen paullo superans; pedes breves, femoribus quatuor anterioribus subtus laminatis, femoribus posticis incrassatis testaceo notatis, tibiis testaceo fasciatis.*

Female. Blackish, stout, nearly elliptical. Head very much narrower than the prothorax; tip of the vertex slightly prominent; two slightly diverging keels extending from the tip to the middle of the front, where there is an anterior keel which is forked towards the face. Eyes prominent. Antennæ very slender, with tawny bands. Prothorax with a broad luteous band adjoining the base of the fore wings; fore part tuberculate, with a keel which is most apparent towards the fore border, and with two short lateral keels which diverge towards the base of the fore wings; a luteous patch on each side, which is dilated and angular; hind part lanceolate, slightly tuberculate and with a slight interrupted keel, extending a little beyond the tip of the abdomen, but not beyond the hind femora. Pectus tawny. Legs short, stout; four anterior femora with a pale testaceous notched membrane beneath; hind femora very thick, with a few small pale testaceous marks above and beneath; four anterior tibiæ with three pale testaceous bands; hind tibiæ with two pale testaceous bands; hind tarsi pale testaceous, with black tips. Wings rudimentary. Length of the body 4 lines.

The bend on the prothorax distinguishes it from T. lobulata.

a. Santarem. From Mr. Bates' collection.

Africa.

38. Tettix telifera.

Mas. *Picea, gracilis; prothorax subtricarinatus, spinis duabus lateralibus longis acutis, postice lanceolatus gracillimus abdomen longissime superans; pedes sat graciles, tibiis posticis inermibus; alæ posticæ cinereo hyalinæ, vitta costali nigra, margine postico nigricante.*

Male. Piceous, slender, allied to the genus Scelymene. Head small, much narrower than the prothorax, protuberant between the antennæ, where the keel, which extends from the vertex, forms two diverging keels; an anterior keel, forked towards the face. Eyes prominent. Prothorax with three slight keels; lateral keels abbreviated towards the face, diverging to the base of the fore wings, converging from thence to the tip; a long acute spine extending horizontally and directly on each side; hind part lanceolate, compressed, very slender, extending for near two-thirds of its

length beyond the abdomen. Legs rather slender; hind femora stout; hind tibiæ without spines. Fore wings rudimentary. Hind wings cinereous, hyaline, with a black costal stripe; exterior border festooned, blackish. Length of the body 8½ lines; expansion of the hind wings 14½ lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

39. Tettix jugata.

Fœm. *Picea, robusta, subscabra; oculi subprominuli; antennæ basi rufescentes; prothorax fortiter carinatus, antice angulatim productus verticem superans, postice lanceolatus, abdomen paullo superans; tibiæ posticæ spinosæ; alæ posticæ cinereæ, apud costam nigræ.*

Female. Piceous, stout, slightly scabrous. Head much narrower than the prothorax, nearly hidden above by the angular fore border of the prothorax, which projects over it like a hood; a keel extending from the vertex, parted into two between the antennæ, united in the fore part of the front, forked towards the face. Eyes slightly prominent. Antennæ very slender, reddish towards the base; two short exterior keels in the fore part of the front. Prothorax with a well-defined keel, which is highest towards the fore border; two slight lateral keels, diverging from the first transverse impressed line, converging from thence to the tip; hind part lanceolate, extending a little beyond the abdomen and the hind femora. Hind femora very thick; hind tibiæ with short spines. Fore wings rudimentary. Hind wings ample, cinereous, black along the costa. Length of the body 7 lines; expansion of the hind wings 12 lines.

a. Natal. From M. Gueinzius' collection.

40. Tettix subpustulata.

Mas. *Picea, gracilis, carina dorsali bene determinata; prothorax scaber, carinis lateralibus antice disjunctis, postice lanceolatus, abdomen longe superans; tibiæ posticæ spinulosæ, basi fulvæ; alæ posticæ diaphanæ.*

Male. Piceous, slender. Head and prothorax with a well-defined keel, which is divided into two keels on the front, and again united near the face, where it is forked. Prothorax scabrous, with two lateral keels, which are dislocated in the fore part and converge from the base of the fore wings to the tip; hind part lanceolate, compressed, extending for more than one-third of its length beyond the tip of the abdomen. Legs moderately stout; hind tibiæ with minute spines, tawny towards the base. Hind wings pellucid, extending somewhat beyond the abdomen; veins black Length of the body 4½—5 lines; expansion of the hind wings 12—13 lines.

a, *b*. South Africa. Presented by Sir A. Smith.
c, *d*. Natal. From M. Gueinzius' collection.

41. Tettix odiosa.

Fœm. *Picea, aptera, robusta; oculi subprominuli; antennæ gracillimæ, basi fulvæ; prothorax rugosus, carina dorsali bene determinata, postice lanceolatus, abdominis apicem fere attingens; abdomen e maculis pallide testaceis quadrivittatum; femora quatuor anteriora supra subtusque tuberculato-subdilatata; femora postica fulvo notata; tibiæ quatuor anteriores fulvo trifasciatæ; tibiæ postico albido unifasciatæ.*

Female. Piceous, apterous, stout. Head narrower than the prothorax, with a slight keel, which is looped between the sockets of the antennæ and forked towards the face as usual. Eyes slightly prominent. Antennæ very slender, tawny towards the base. Prothorax rugose, with a well-defined middle keel and with two slight and slightly angular lateral keels, which as usual are abbreviated towards the fore border and converge towards the tip; hind part lanceolate, extending nearly to the tip of the abdomen, which has three rows of pale testaceous spots on each side. Legs short, moderately stout; four anterior femora with tuberculate edges above and beneath; hind femora with some tawny marks; four anterior tibiæ with three tawny bands; hind tibiæ with some very minute spines on each side and with a whitish band near the base. Length of the body 4 lines.

This and T. infausta have a slight affinity to the genus Batrachotettix.

a. Cape Town. Presented by R. Trimen, Esq.

42. Tettix infausta.

Fœm. *Picea, crassa; prothorax tuberculatus, fortite tricarinatus, carinis lateralibus angulatis antice abbreviatis, postice lanceolatus, abdomen paullo superans; femora postica extus rugosa, subtus fulvo varia; alæ posticæ nigricantes, diaphano marginatæ.*

Female. Piceous, very stout. Head very much narrower than the prothorax, with a slight keel, which is looped between the sockets of the antennæ and forked towards the face as usual. Prothorax tuberculate, dilated on each side into an oblique conical lobe; fore part with three well-defined keels; lateral keels abbreviated towards the fore border, forming an angle near the base of each fore wing, and converging as usual towards the tip; hind part lanceolate, extending a little beyond the tip of the abdomen. Legs short, stout; hind femora rugose on the outer side, partly tawny beneath; hind tibiæ with a few short stout spines on each side. Fore wings rudimentary. Hind wings blackish, pellucid along the exterior border; veins black. Length of the body 6 lines; expansion of the hind wings 12 lines.

a, *b*. South Africa. Presented by Sir A. Smith.
c, *d*. Natal. From M. Gueinzius collection.

43. Tettix vittata.

Fœm. *Nigricans*; T. subpustulatæ *affinis*; *prothorax fulvo univittatus et bimaculatus; pedes testaceo pallido varii, femoribus notatis, tibiis quatuor anterioribus trifasciatis, tibiis posticis unifasciatis; alæ posticæ cinereæ, apud costam nigricantes.*

Female. Blackish, in structure like T. subpustulata. Prothorax with a tawny stripe along the keel; hind part lanceolate, wholly tawny, extending for one-third of its length beyond the abdomen; a tawny spot on each side, near the base of the fore wing. Legs rather short and slender; femora with some pale testaceous marks; four anterior tibiæ with three pale testaceous bands; hind tibiæ with a pale testaceous basal band. Fore wings rudimentary. Hind wings cinereous, blackish along the costa; veins black. Length of the body 4½ lines; expansion of the hind wings 11 lines.

a. Natal. From M. Gueinzius' collection.

44. Tettix pallipes.

Fœm. *Fulva, fusco varia, subcarinata; oculi valde prominuli; prothorax carinis lateralibus antice abbreviatis, postice lanceolatus, abdomen longissime superans; tibiæ albæ, fusco fasciatæ; alæ posticæ diaphanæ, striga costali fusca.*

Female. Tawny, slightly mottled with brown, paler beneath. Head and prothorax with a slight keel. Head very much narrower than the prothorax; front with two keels above and with a single forked keel towards the face. Eyes very prominent. Prothorax with two slight lateral keels, which are abbreviated in front and converge towards the tip as usual; hind part lanceolate, compressed, extending for somewhat less than half its length beyond the abdomen. Legs rather short and slender; femora speckled with brown; tibiæ and tarsi whitish; four anterior tibiæ with three brown bands; hind tibiæ with two brown bands. Fore wings rudimentary. Hind wings pellucid, with a brown postmedial costal streak; veins black. Length of the body 3 lines; expansion of the hind wings 8 lines.

a, *b*. Sierra Leone. Presented by the Rev. D. F. Morgan.

45. Tettix aliena.

Fœm. *Picea, robusta; oculi subprominuli; prothorax subtuberculatus, subcarinatus, postice lanceolatus, abdomen paullo superans; pedes breviusculi, fulvo varii.*

Female. Piceous, stout. Head narrower than the prothorax, with a slight keel, which is as usual looped between the sockets of the antennæ and forked towards the face. Eyes slightly prominent. Antennæ slender. Prothorax minutely tuberculate, with a very slight keel; hind part lanceolate, extending a little beyond the tip of the abdomen. Legs

slender, partly tawny, rather short; hind tibiæ with some short stout spines on each side. Length of the body 4 lines.

The hind wings in the specimen described are not fully developed.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Madagascar.

46. Tettix Lucifer.

Tetrix Lucifer, *Serv. Hist. Orth.* 758.

Madagascar.

47. Tettix Belphegor.

Tetrix Belphegor, *Serv. Hist. Orth.* 760.

Madagascar.

South Asia.

48. Tettix exsultans.

Tetrix exsultans, *Stal, Eug. Resa*, 347.

Hong Kong.

49. Tettix nodifera.

Fœm. *Picea, subtus fulva; antennarum articuli apice fulvi; prothorax rugosus, biseriatim tuberculatus, subtricarinatus, postice lanceolatus, abdomen longissime superans, lateribus trispinosus; femora supra subtusque dentata; tibiæ testaceo bifasciatæ; alæ posticæ diaphanæ.*

Female. Piceous, tawny beneath. Head with the usual structure in this genus. Tips of the joints of the antennæ tawny. Prothorax rugose, with two rows of tubercles, with a short broad horizontal spine on each side and with two smaller spines on each side near the pectus; three slight keels, the lateral keels interrupted near the fore border, to which they extend; hind part lanceolate, extending for half its length beyond the tip of the abdomen. Legs rather slender; femora dentate above and beneath; tibiæ with two testaceous bands. Fore wings rudimentary. Hind wings pellucid, with a blackish costal streak and with black veins. Length of the body 10 lines; expansion of the hind wings 15 lines.

This and the three following species are closely allied to the genus Scelymena. The dentate femora distinguish it from T. exsultans.

a. North China. From Mr. Fortune's collection.

50. Tettix pallitarsis.

Mas. *Nigra aut picea; caput testaceum; oculi albidi, valde prominuli; prothorax subrugulosus, subtricarinatus, postice lanceolatus, abdomen longissime superans, lateribus unispinosis; tibiæ posticæ albido unifasciatæ; tarsi postici albi, apice nigri; alæ posticæ cinereæ, apice fuscæ.*

Male and female. Black, or piceous, slender. Head testaceous, much narrower than the prothorax, with the usual structure. Eyes whitish, very prominent. Prothorax slightly rugulose, with an acute horizontal spine on each side, and with three very slight keels; lateral keels abbreviated towards the fore border; hind part lanceolate, extending for half its length beyond the tip of the abdomen. Legs slender; hind tibiæ with a whitish band beyond the middle; hind tarsi white, their tips black. Fore wings rudimentary. Hind wings cinereous, brown towards the tips; costal stripe and veins black. Length of the body 7½—8 lines; expansion of the hind wings 13—14 lines.

The much longer prothorax distinguishes it and the six following species from T. exsultans.

a. Hong Kong. Presented by J. C. Bowring, Esq.
b, *c*. China. Presented by Dr. Cantor.
d—g. China. Presented by G. T. Laye, Esq.

51. Tettix cervina.

Fœm. *Cervina, gracilis; prothorax subtricarinatus, spinis duabus lateralibus obliquis, carinis lateralibus antice disjunctis, postice lanceolatus, abdomen longissime superans; alæ posticæ subcinereæ, striga costali venisque cervinis.*

Female. Fawn-colour, slender. Head with the usual structure. Prothorax smooth, with a horizontal oblique spine on each side and with three very slight keels; lateral keels interrupted and dislocated near the fore border; hind part lanceolate, extending for near half its length beyond the tip of the abdomen. Legs slender. Fore wings rudimentary. Hind wings slightly cinereous; costal streak and veins fawn-colour. Length of the body 7 lines; expansion of the hind wings 11 lines.

a. China. Presented by G. T. Laye, Esq.

52. Tettix munda.

Mas. *Testacea, gracilis; caput supra nigricans; antennæ nigricantes, basi testaceæ; prothorax lævis, subtricarinatus, carinis lateralibus antice interruptis, carinulis duabus interioribus brevissimis, postice lanceolatus, abdomen longe superans; alæ posticæ diaphanæ, striga costali nigricante.*

Male. Fawn-colour, slender. Head blackish above and on each side; vertex and front with the usual keels. Eyes piceous, prominent. Antennæ blackish, very slender, testaceous towards the base. Prothorax smooth, with a well-defined keel; lateral keels very slight, interrupted near the fore border, converging to the tip; two intermediate very short and slight keels; hind part lanceolate, extending much beyond the tip of the abdomen. Legs slender; hind tibiæ with very minute spines. Fore wings rudimentary. Hind wings pellucid, extending somewhat beyond the abdomen, with a blackish costal streak. Length of the body 4 lines; expansion of the hind wings 10 lines.

The fawn-coloured body and more especially the pale hind tibiæ

distinguish it from T. Cingalensis. It has more resemblance to T. discalis, in which the disk of the prothorax is darker.

a. North Hindostan. From Capt. Boyes' collection.

53. Tettix umbrifera.

Fœm. *Fusca, gracilis; oculi prominuli; prothorax postice lanceolatus, abdomen longe superans; pedes testacei, graciles, femoribus supra fuscis; alæ posticæ cinereæ, prothoracem longe superantes.*

Female. Brown, slender. Head with a well-defined looped keel on the vertex; front with three slight keels, the middle one forked near the face. Eyes prominent. Prothorax with a distinct middle keel and with two interrupted diverging lateral keels; hind part lanceolate, extending for rather less than half its length beyond the tip of the abdomen. Legs slender, testaceous; femora brown above. Hind wings cinereous, extending much beyond the tip of the prothorax. Length of the body 5 lines; expansion of the hind wings 14 lines.

a. Bombay. Presented by Dr. Leith.

54. Tettix lineifera.

Mas. *Ferruginea, gracilis; oculi subprominuli; antennæ basi testaceæ; prothorax postice lanceolatus, testaceo bivittatus, carinulis duabus longitudinalibus, abdomen longe superans; pedes testacei, graciles, femoribus supra fuscis, tibiis fusco unifasciatis, tarsis basi apiceque nigricantibus; alæ posticæ cinereæ, prothoracem longe superantes.*

Male. Ferruginous, slender. Head with a keel which has the usual structure on the front, but does not extend to the hind part of the vertex; front with two very slight lateral keels. Eyes slightly prominent. Antennæ testaceous towards the base. Prothorax with three keels, the middle keel deepest in front, the lateral pair interrupted and rounded as usual; hind part lanceolate, with two longitudinal ridges and with two testaceous stripes, extending for nearly one-third of its length beyond the tip of the abdomen. Legs slender, testaceous; femora mostly brown above; tibiæ with a brown band; tarsi blackish at the base and at the tips. Hind wings cinereous, extending much beyond the tip of the prothorax. Length of the body 4¾ lines; expansion of the hind wings 11 lines.

Bombay. In Dr. Leith's collection.

55. Tettix vittifera.

Mas. *Fusca, gracilis, subtus testacea; caput apud os testaceum; oculi prominuli; prothorax subrugosus, testaceo late unifasciatus, postice lanceolatus, abdomen longe superans; pedes graciles, femoribus subtus testaceis, tibiis tarsisque quatuor anterioribus testaceo fasciatis, tibiis tarsisque posticis fulvis; alæ posticæ cinereæ, prothoracem longe superantes.*

Male. Brown, slender, testaceous beneath. Head with the usual structure, testaceous towards the mouth. Eyes ferruginous, prominent. Prothorax with a well-defined testaceous stripe, which occupies the whole

of the hind part; the three keels with the usual structure; disk slightly rugose; hind part lanceolate, extending for one-third of its length beyond the tip of the abdomen. Legs slender; femora testaceous beneath; four anterior tibiæ and tarsi with testaceous bands; hind tibiæ and hind tarsi tawny. Hind wings cinereous, extending much beyond the tip of the prothorax. Length of the body 5½ lines; expansion of the hind wings 13½ lines.

a. Bombay. Presented by Dr. Leith.

56. Tettix dorsifera.

Mas. *Nigricans, gracilis; oculi valde prominuli; prothorax subtuberculatus, albido late unifasciatus, postice cinereus lanceolatus e plagis nigricantibus univittatus, abdomen longissime superans; pedes graciles, tibiis tarsisque testaceis nigro fasciatis; alæ posticæ cinereæ, prothoracem paullo superantes.*

Male. Blackish, slender. Head with the usual structure. Eyes tawny, very prominent. Prothorax slightly tuberculate, with a broad whitish band on the widest part; middle keel deepest towards the fore border; lateral keels as usual; hind part lanceolate, cinereous, with a stripe of blackish patches, extending for nearly half its length beyond the tip of the abdomen. Legs slender; tibiæ and tarsi testaceous, with black bands. Hind wings cinereous, extending a little beyond the tip of the prothorax. Length of the body 3½ lines; expansion of the hind wings 9 lines.

Bombay. In Dr. Leith's collection.

57. Tettix obliquifera.

Mas. *Ferruginea, gracilis, subtus testacea; oculi prominuli; prothorax vitta dorsali lata lanceolata nigricante, strigis duabus obliquis strigisque duabus posterioribus longitudinalibus atris, postice lanceolatus, abdomen longe superans; pedes graciles, femoribus subtus tibiis tarsisque pallide testaceis, tarsis basi apiceque nigris; alæ posticæ cinereæ, prothoracem longe superantes.*

Male. Ferruginous, dull testaceous beneath, slender. Head with the usual structure. Eyes livid, prominent. Prothorax with a well-defined middle keel; lateral keels as usual; a broad blackish lanceolate stripe on the disk; a short broad oblique deep black streak and a hinder smaller longitudinal deep black streak on each side; hind part lanceolate, extending for full one-third of its length beyond the tip of the abdomen. Legs slender: femora beneath, tibiæ and tarsi pale testaceous; tarsi black at the base and at the tips. Hind wings cinereous, extending much beyond the tip of the prothorax. Length of the body 4½ lines; expansion of the hind wings 13½ lines.

Bombay. In Dr. Leith's collection.

58. Tettix nigricollis.

Mas. *Pallide cinerea, gracilis; frons nigricans; oculi valde prominuli; antennæ ferrugineæ; prothorax fascia antica lata abbreviata strigisque duabus longitudinalibus nigris, postice lanceolatus, abdomen longe superans; pedes graciles, femoribus extus nigricantibus, femoribus posticis extus cinereo pallido uniplagiatis, femoribus quatuor anterioribus nigricante fasciatis; alæ posticæ cinereæ, apices versus nigricantes, prothoracem longe superantes.* Var. β.—*Prothorax strigis duabus latis fuscescentibus; femora tota cinerea.*

Male. Pale cinereous, slender. Head with the usual structure; front blackish. Eyes ferruginous, very prominent. Antennæ ferruginous. Prothorax with the usual keels and with a broad black abbreviated band on the fore border; a black longitudinal streak on each side close behind the broadest part; hind part lanceolate, extending for half its length beyond the tip of the abdomen. Abdomen blackish above. Legs slender; femora blackish on the outer side; hind femora with a pale cinereous patch on the outer side; four anterior tibiæ with blackish bands; tarsi with blackish tips. Hind wings cinereous, blackish towards the tips, extending much beyond the tip of the prothorax. *Var.* β.—Prothorax with a short broad brownish streak on each side close behind the broadest part. Femora wholly cinereous. Length of the body $3\frac{1}{2}$ lines; expansion of the hind wings 10 lines.

a. Bombay. Presented by Dr. Leith.

59. Tettix discalis.

Fœm. *Cervina, gracilis, dorso fuscescens; oculi subprominuli; prothorax postice lanceolatus, abdomen longissime superans; tibiæ posticæ spinulosæ; alæ posticæ diaphanæ, striga costali nigricante.*

Female. Fawn-colour, smooth, slender. Head brownish, with a slight middle keel, which, as usual, is looped between the sockets of the antennæ and forked near the face; a short keel on each side near the face. Eyes slightly prominent. Prothorax brownish, bordered with fawn-colour, with three keels, which are highest near the fore border; lateral keels rounded near the base of each fore wing; hind part lanceolate, compressed, extending for rather less than half its length beyond the tip of the abdomen. Legs rather slender; femora brownish cinereous, extending much beyond the tip of the prothorax. Length of the body $4\frac{1}{2}$ lines; expansion of the hind wings 10 lines.

a, b. Ceylon. From Mr. Janson's collection.

60. Tettix armigera.

Fœm. *Fuscescens, gracilis; oculi valde prominuli; palpi albidi; antennæ pallide testaceæ, apices versus fuscæ; prothorax biseriatim subtuberculatus, spinis duabus lateralibus longis fulvis apice nigris, postice cervinus, abdomen longissime superans; pedes nigricantes, tibiis quatuor anterioribus fulvo trifasciatis, tarsis posticis fulvis nigricante unifasciatis; alæ posticæ cinereæ.*

Female. Brownish, minutely punctured. Head with the usual middle keel and with a short slight keel on each side of the front. Eyes very prominent. Palpi whitish. Antennæ pale testaceous, brown towards the tips, much longer than the breadth of the head. Prothorax with a flat disk, with two rows of minute tubercles, with two strongly impressed transverse lines, and with three slight keels; middle keel highest between the transverse impressed lines; lateral keels rounded at the base of each fore wing; a long, acute, tawny, black-tipped spine extending directly on each side between the fore coxæ and the middle coxæ; hind part fawn-colour, lanceolate, compressed, extending for half its length beyond the abdomen. Legs blackish; four anterior tibiæ with three tawny bands; hind tarsi tawny, with a blackish band. Fore wings rudimentary. Hind wings cinereous. Length of the body 5½ lines; expansion of the hind wings 12 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

61. Tettix Cingalensis.

Mas. *Fusca, gracilis; oculi prominuli; prothorax inermis, carina dorsali antice bene determinata, postice abdomen sat superans; pedes graciles, tibiis posticis spinulosis, tarsis posticis testaceis fusco unifasciatis; alæ posticæ subcinereæ, striga costali subapicali fusca.*

Male. Brown. Head with the usual looped keel. Eyes prominent. Prothorax with three well-defined keels; middle keel highest near the fore border; lateral keels rounded near the base of the rudimentary fore wings; two short and slight ridges on each side between the middle keel and the lateral keel; no lateral spines; hind part lanceolate, compressed, extending for one-third of its length beyond the tip of the abdomen. Legs slender; hind tibiæ with minute spines; hind tarsi testaceous, with a brown band. Hind wings pale cinereous, with a brown postmedial costal streak; veins black, pale testaceous along the interior border. Length of the body 5½ lines; expansion of the hind wings 11 lines.

a. Ceylon. From Dr. Gardner's collection.

62. Tettix reducta.

Fœm. *Fuscescente cinerea; caput cinereum; oculi valde prominuli; antennæ nigræ, testaceo fasciatæ; prothorax inermis, subtuberculatus, testaceo unimaculatus et unifasciatus, postice abdomen longissime superans; pedes sat graciles, tibiis tarsisque quatuor anterioribus nigris testaceo fasciatis, tibiis posticis nigris basi flavis, tarsis posticis testaceis; alæ posticæ cinereæ.*

Female. Brownish cinereous. Head cinereous, with the usual looped keel. Eyes very prominent. Antennæ black, with some testaceous bands. Prothorax with a few minute tubercles in the disk and with a posterior testaceous band; a testaceous spot near the fore border; three well-defined keels; lateral keels rounded near the base of the rudimentary fore wings; apical part lanceolate, compressed, extending for half its length beyond the tip of the abdomen. Legs rather slender; four anterior tibiæ and tarsi black, with pale testaceous bands; hind tibiæ black, white towards the

base; hind tarsi testaceous. Hind wings cinereous; veins black. Length of the body 3 lines; expansion of the hind wings 7 lines.

a. China. Presented by G. T. Laye, Esq.
b, *c*. Hong Kong. Presented by J. C. Bowring, Esq.

63. Tettix plana.

Fœm. *Cinereo-fusca, robusta; clypeus albidus; oculi valde prominuli; prothorax scaber, carinis tribus bene determinatis, lateribus dilatatis rotundatis, postice abdominis apicem attingens; pedes cinerei, sat graciles; tibiis tarsisque quatuor anterioribus fusco fasciatis, femoribus posticis subtus nigricantibus, tibiis posticis nigricante bifasciatis; alæ minimæ.*

Female. Cinereous-brown, stout. Head with the usual looped keel, whitish about the mouth. Eyes whitish, very prominent. Prothorax scabrous, with three well-defined keels; lateral keels widely interrupted and dislocated; a short longitudinal ridge on each side of the disk between the middle keel and the rounded part of the lateral keel; sides dilated and rounded between the fore coxæ and the middle coxæ; hind part lanceolate, extending to ths tip of the abdomen. Sheaths of the oviduct serrated. Legs cinereous, rather slender; four anterior tibiæ and tarsi with brown bands; hind femora blackish beneath; hind tibiæ with two blackish bands and with very minute spines. Wings rudimentary. Length of the body 4 lines.

The banded anterior tibiæ and tarsi distinguish it from T. exsultans.

a. China. Presented by G. T. Laye, Esq.

64. Tettix quadriplagiata.

Fœm. *Cervina, robusta, uptera; oculi subprominuli; prothorax nigro quadriplagiatus, carinis tribus bene determinatis, lateribus subdilatatis, postice abdominis apicem fere attingens; pedes robusti, femoribus posticis incrassatis.*

Female. Fawn-colour, stout, wingless. Head with the usual looped keel. Eyes slightly prominent. Prothorax with two black patches on each side, and with three well-defined keels; lateral keels interrupted in the fore part, slightly rounded in a line with the middle coxæ; sides slightly dilated and rounded between the fore coxæ and the middle coxæ; hind part lanceolate, extending nearly to the tip of the abdomen. Legs stout; hind femora very broad; hind tibiæ with minute spines. Length of the body 5 lines.

a. North Hindostan. From Dr. Hooker's collection.

65. Tettix balteata.

Fœm. *Cinerea, robusta; oculi valde prominuli; prothorax subcarinatus, nigro late fasciatus, punctis lateralibus anterioribus fuscis, lateribus subangulatis, postice fusco trifasciatus, abdomen longissime superans; abdominis dorsum nigrum; pedes breves, robusti, fusco fasciati, femoribus quatuor anterioribus tibiisque intermediis subdilatatis; alæ posticæ cinereæ, maculis quatuor costalibus subapicalibus albidis.*

Female. Pale cinereous, stout. Head small, with the usual looped keel, whitish about the mouth. Eyes very prominent. Prothorax with a black band, which is narrowest in the middle and is opposite the hind coxæ; a few anterior brown points on each side; keels extremely slight; lateral keels abbreviated in front, slightly angular on each side; hind part lanceolate, compressed, with three brown bands, extending for more than half its length beyond the tip of the abdomen. Abdomen black above. Legs short, stout, with brown bands; four anterior femora and middle tibiæ slightly dilated and membranous above and beneath. Fore wings rudimentary. Hind wings cinereous, with four whitish spots along the apical part of the costa; veins black. Length of the body $4\frac{1}{2}$ lines; expansion of the hind wings 9 lines.

a. South Hindostan. Presented by M. J. Walhouse, Esq.

66. Tettix notata.

Fœm. *Fusca, robusta, subscabra, subtus fulva; oculi sat prominuli; prothorax subtricarinatus, lateribus ex parte cervinis, postice abdomen sat superans; abdomen cervinum, nigricante guttatum; pedes cervini, robusti, fusco fasciati; alæ minimæ.*

Female. Brown, stout, minutely scabrous, fawn-coloured beneath. Head with the usual looped keel. Eyes dingy whitish, rather prominent. Prothorax with three very slight keels; lateral keels widely interrupted in the fore part, rounded as usual; sides partly fawn-coloured; hind part lanceolate, extending rather beyond the tip of the abdomen. Abdomen fawn-colour, with four rows of blackish dots on each side; ventral segments with two rows of brown spots. Legs fawn-colour, stout, with brown bands. Wings rudimentary. Length of the body 4 lines.

The specimen described is deprived of its hind legs. The spots of the abdomen distinguish it from T. exsultans.

a. Hong Kong. Presented by J. C. Bowring, Esq.

67. Tettix cucullifera.

Fœm. *Cervina, sat robusta; oculi prominuli; prothorax antice lanceolatus, caput longe superans, postice abdomen longe superans; pedes robusti, femoribus posticis apice nigricantibus; alæ anticæ disco nigræ; alæ posticæ cinereæ, striga costali cervina.*

Female. Fawn-colour, moderately stout. Head with the usual looped keel. Eyes prominent. Prothorax with three well-defined keels; fore part lanceolate, extending much beyond the head; lateral keels rounded near the rudimentary fore wings, whose disks are black; hind part lanceolate, extending much beyond the tip of the abdomen. Legs stout; hind femora with blackish tips; hind tibiæ with very short spines. Hind wings cinereous, with a fawn-coloured streak along the apical part of the costa; veins black. Length of the body 7 lines; expansion of the hind wings 12 lines.

a. Amoy, China. From Mr. Stevens' collection.

68. Tettix subcucullata.

Fœm. *Ferruginea, subtiliter scabra, sat robusta; carinæ frontales inter antennas late disjunctæ; oculi subprominuli; prothorax fortiter carinatus, antice lanceolatus, caput paullo superans, postice abdominis apicem attingens; alæ posticæ minimæ.*

Female. Ferruginous, finely scabrous, rather stout. Head a little narrower than the prothorax; keel with the loop much broader than in other species of the genus. Antennæ very slender. Eyes slightly prominent. Prothorax with a high middle keel; fore part lanceolate, extending a little beyond the head; hind part lanceolate, extending to the tip of the abdomen. Legs moderately stout; hind tibiæ with very short spines. Wings rudimentary. Length of the body 4½ lines.

a, *b*. Ceylon. Presented by Dr. Templeton.

Australasia.

69. Tettix Belzebuth.

Tetrix Belzebuth, *Serv. Hist. Orth.* 759—Acridium (Tetrix) Belzebuth, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 167, pl. 22, f. 9.

Sumatra.

a—*e*. Sarawak, Borneo. From Mr. Wallace's collection.

70. Tettix cornuta.

Acridium (Tetrix) cornutum, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 167.

Buitenzorg.

71. Tettix dilatata.

Acridium (Tetrix) dilatatum, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 169, pl. 22, f. 12.

Java.

72. Tettix brevis.

Acridium (Tetrix) breve, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 170, pl. 22, f. 13.

Java. Tondano. New Guinea.

73. Tettix gracilis.

Acridium (Tetrix) gracile, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 169.

Java. Tondano.

74. Tettix cephalica.

Acridium (Tetrix) cephalicum, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 169.

Sumatra.

75. Tettix emarginata.

Acridium (Tetrix) emarginatum, *Haan*, *Verz. Gesch. Ned. Ind. Bez. Ins.* 170, pl. 22, f. 15.

New Guinea.

76. Tettix phyllocera.

Acridium (Tetrix) phyllocerum, *Haan*, *Verz. Gesch. Ned. Ind. Bez Ins.* 168, pl. 22, f. 10.

Buitenzorg.

77. Tettix Millerborgi.

———, *Stal*, *Eug. Resa*, 346—Tettix Millerborgi, *Stal*, *Ofv. K. V. Ak. Forh.* 1855, 353.

Java.

78. Tettix nodulosa.

nodulosa, *Stal*, *Eug. Resa*, 346.

Java.

79. Tettix histrica.

histrica, *Stal*, *Eug. Resa*, 347.

Java.

80. Tettix producta.

Fœm. *Picea, gracilis; caput inter antennas prominulum; prothorax carinis lateralibus acute angulatis, postice subtuberculatus, abdomen longe superans; femora antica supra subtusque tridentata; alæ posticæ diaphanæ, nigricante marginatæ, vitta costali nigra.*

Female. Piceous, very like Scelymena extensa in structure. Head less prominent between the sockets of the antennæ. Prothorax with the three keels more determinate in front; the lateral keels not slightly rounded like those of S. extensa, but acutely angular; apical part shorter, broader, and with smaller tubercles. Fore femora tridentate above and beneath. Hind tibiæ with a few extremely short spines on each side. Hind wings pellucid, very iridescent, with a slight blackish tinge along the exterior border; costal stripe and veins black. Length of the body 12 lines; expansion of the hind wings 21 lines.

a, *b*. Philippine Isles. From Mr. Cuming's collection.

81. Tettix sobria.

Fœm. *Cervina, robusta; caput inter antennas valde prominulum carinis valde approximatis; oculi prominuli; prothorax postice lanceolatus, abdomen longe superans; pedes sat graciles, tibiis tarsisque nigricantibus; alæ posticæ cinereæ.*

Female. Fawn-colour, stout. Head very protuberant and with two very approximate keels between the sockets of the antennæ; vertex with an oblique keel on each side. Eyes piceous, prominent. Prothorax with two transverse impressed lines in the fore part, and with three very slight keels; lateral keels disappearing towards the fore border, slightly rounded near the base of each rudimentary fore wing; hind part lanceolate, compressed, extending much beyond the tip of the abdomen. Legs rather slender; tibiæ and tarsi blackish; hind tibiæ with a few extremely small spines on each side. Hind wings cinereous; veins black. Length of the body 9 lines; expansion of the hind wings 16 lines.

a. Philippine Isles. From Mr. Cuming's collection.

82. Tettix morbillosa.

Fœm. *Fusca, robusta, aptera; caput bispinosum, carinis duabus inter antennas sat late disjunctis; oculi valde prominuli; antennæ apices versus luteæ; prothorax antice tuberculatus, postice rugosus, abdominis apicem attingens, lateribus dilatatis rotundatis; pedes robusti, femoribus posticis crassis fulvo tuberculatis, tibiis posticis femoribusque quatuor anterioribus fulvo bifasciatis, tibiis quatuor anterioribus tarsisque fulvo unifasciatis.*

Female. Brown, stout, wingless. Head tawny in front; two short stout spines on the vertex; the two keels on the front rather wide apart. Eyes dingy, whitish, very prominent. Antennæ very slender, luteous towards the tips. Prothorax with large tubercles in the fore part, rugose behind; dorsal keels with two elevated curves in the fore part, very low elsewhere; lateral keels well-defined between the fore border and the first transverse impressed line; sides dilated and forming two rounded lobes; hind part lanceolate, extending to the tip of the abdomen. Legs stout, pubescent; hind femora very thick, with several tawny tubercles on the outer side; hind tibiæ and four anterior femora with two tawny bands; tarsi and four anterior tibiæ with one tawny band. Length of the body 5 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

83. Tettix minax.

Fœm. *Picea, gracilis, aptera, subtiliter scabra; caput valde ascendens, fronte longissimo, clypeo nigro nitido; oculi prominuli; palpi clavati; prothorax nigro trivittatus, spinis duabus lateralibus longis acutis, postice valde acuminatus, abdominis apicem fere attingens; pedes graciles.*

Female. Piceous, slender, wingless, finely scabrous. Head ascending high above the prothorax, with two small calli on each side of the middle keel, whose loop is extremely narrow; front very long, with a slight furrow on each side towards the mouth; clypeus black, shining. Eyes prominent. Palpi clavate. Prothorax with two black stripes and with three very slight keels; lateral keels very slightly curved; a long and slender spine proceeding directly from each side; hind part lanceolate, much acuminated towards the tip, extending nearly to the tip of the abdomen. Sheaths of

the oviduct serrated above and beneath. Legs slender; hind tibiæ with very minute spines. Length of the body 7 lines.

a. Philippine Isles. From Mr. Cuming's collection.

84. Tettix ensatrix.

Fœm. *Picea, scabra, aptera, sat gracilis; caput carinis inter antennas late disjunctis, clypeo palpisque ferrugineis; oculi prominuli; prothorax cornu longo compresso oblique ascendente basi tuberculato armatus, postice oblique rugosus, abdomen longe superans; pedes graciles.*

Female. Piceous, scabrous, wingless, rather slender. Head with the keel forming a nearly round loop on the front; clypeus and palpi ferruginous, shining. Eyes whitish, prominent. Prothorax forming in front a deep, compressed, obliquely ascending horn, which extends far beyond the head and is nearly one-third of the whole length of the body, and has two tubercles on the fore side very near the vertex; middle keel well defined, emitting three oblique ridges on each side; hind part lanceolate, extending much beyond the tip of the abdomen. Legs slender; hind tibiæ with three or four extremely minute spines on each side. Length of the body $8\frac{1}{2}$ lines.

a. Philippine Isles. From the Zoological Society's collection.

85. Tettix gladiatrix.

Mas. *Præcedenti valde affinis; prothorax cornu minus ascendente apicem versus latiore basi magis tuberculato, postice abdomen sat superans.*

Male. Very near allied to T. ensatrix. Horn of the prothorax less ascending, deeper towards its tip, much more protuberant immediately above the vertex. Prothorax with more strongly-marked oblique ridges; hind part lanceolate, extending rather beyond the tip of the abdomen. Hind tibiæ with minute spines on each side. Length of the body 10 lines.

a. Philippine Isles. From the Zoological Society's collection.

86. Tettix cultatrix.

Fœm. *Præcedenti valde affinis; prothorax abdomen paullo superans, rugis transversis arcuatis non obliquis.*

Female. Closely allied to the preceding species, and differing like it from T. ensatrix. Horn of the prothorax a little less protuberant above the vertex; hind part extending a little beyond the tip of the abdomen, broader at the tip and less attenuated than that of T. ensatrix; ridges on the dorsum curved and not oblique like those of the above species. Length of the body $7\frac{1}{2}$ lines.

a. Philippine Isles. From Mr. Cuming's collection.

87. Tettix inornata.

Fœm. *Picea, gracilis; frons fulvo varia; oculi prominuli; prothorax subpustulatus et longitudinaliter subrugulosus, lateribus trispinosis, postice valde attenuatus, abdomen longissime superans; pedes gracillimi; alæ posticæ cinereæ.*

Female. Piceous, slender. Head smooth; front partly tawny; keel well defined, the looped part very narrow. Eyes prominent. Prothorax with two well-defined transverse impressed lines, with three extremely slight keels, and with many minute longitudinal ridges and pustules; three spines on each side, the hind spine longer than the two others and inclined obliquely backward; hind part lanceolate, compressed, much attenuated, extending for full half its length beyond the abdomen. Sheaths of the oviduct long, slender, minutely serrated. Legs very slender; hind tibiæ with minute spines. Hind wings cinereous. Length of the body 9½ lines; expansion of the hind wings 16 lines.

a. Birmah. From Mr. Treacy's collection.

88. Tettix consocia.

Fœm. *Picea, gracilis; caput inter antennas prominulum carinis fere contiguis; oculi valde prominuli; palpi albi, clavati; prothorax lateribus rotundatis, carina dorsali humillima testaceo fasciata, postice valde attenuatus, abdomen longissime superans; abdominis dorsum nigrum; alæ posticæ cinereæ, vitta costali nigricante.*

Female. Piceous, slender. Head protuberant and with two nearly contiguous keels between the sockets of the antennæ. Eyes very prominent, higher than the prothorax. Palpi white, clavate. Prothorax unarmed, with two well-defined transverse impressed lines, and with the three usual keels, which are very slight; middle keel with several testaceous bands; sides rounded near the middle coxæ; hind part much attenuated, extending for half its length beyond the tip of the abdomen. Abdomen black above. Legs slender; hind tibiæ with very minute spines. Hind wings cinereous, with a blackish costal stripe; veins black. Length of the body 5½ lines; expansion of the hind wings 18 lines.

The hind part of the prothorax is more elongated than that of T. Cingalensis.

a. Philippine Isles. From Mr. Cuming's collection.

89. Tettix femoralis.

Fœm. *Ferruginea; caput prothoracem paullo superans; oculi magni, valde prominuli; prothorax subtricarinatus, lateribus dilatatis acutis, postice abdomen longe superans; pedes graciles, femoribus posticis extus nigro vittatis, tibiis tarsisque quatuor anterioribus fusco bifasciatis; alæ posticæ cinereæ.*

Female. Ferruginous. Head ascending a little higher than the prothorax, prominent and with two nearly continuous keels between the sockets of the antennæ; front long. Eyes whitish, large very prominent.

Prothorax with two slight transverse impressed lines and with three very slight keels, dilated and forming a very broad spine on each side; hind part lanceolate, compressed, extending much beyond the tip of the abdomen. Legs slender; hind femora with a black stripe on the outer side; four anterior tibiæ and tarsi with two brown bands. Hind wings cinereous; veins black. Length of the body 4½ lines; expansion of the hind wings 9 lines.

The shorter prothorax distinguishes this species from T. consocia.

a. Philippine Isles. From Mr. Cuming's collection.

90. Tettix compacta.

Fœm. *Fulva, crassa, aptera; oculi parvi, subprominuli; prothorax piceus, subtuberculatus, vitta dorsali bene determinata, lateribus rotundatis, postice abdominis apicem non attingens; abdominis dorsum piceum; pedes robusti, piceo fasciati, femoribus posticis crassis piceo notatis.*

Female. Tawny, thick, wingless. Head with two parallel keels between the sockets of the antennæ; a short keel on each side of the front; clypeus shining. Eyes small, slightly prominent. Prothorax mostly piceous, with some tubercles and with a strongly-marked dorsal keel; sides rounded; hind part truncate at the tip, extending to two-thirds of the length of the abdomen. Abdomen mostly piceous above; sheaths of the oviduct broad, elongate. Legs stout; hind femora thick, with various piceous marks; four anterior legs and hind tibiæ with piceous bands. Length of the body 4 lines.

The specimen described appears to be not fully developed, but can hardly be identical with T. histrica.

a. Java. From Mr. Argent's collection.

91. Tettix misera.

Mas. *Picea, subtus fulva; oculi valde prominuli; prothorax tricarinatus, subrugosus, spinis duabus lateralibus apicem versus fulvis; pedes quatuor anteriores fulvi, piceo fasciati; alæ posticæ cinereæ.*

Male. Piceous, tawny beneath. Head prominent and with two diverging keels between the sockets of the antennæ; front short. Eyes whitish, very prominent. Prothorax slightly rugose, with three keels, of which the middle one is highest near the fore border; sides dilated, forming a very broad spine, which is tawny towards the tip. Four anterior legs tawny, with several piceous bands. Hind wings cinereous; veins black. Length of the body 3½? lines; expansion of the hind wings 7 lines.

The hind part of the prothorax of the specimen described is mutilated, so that its length cannot be ascertained. The banded four anterior legs distinguish it from T. nodulosa; the hind legs are wanting.

a. Java. From Mr. Argent's collection.

Australia.

92. Tettix spathulata.

spathulata, *Stal*, *Eug. Resa*, 348.

Sydney.

93. Tettix Australis.

Mas et fœm. *Nigricans, sat gracilis; oculi prominuli, verticem non superantes; prothorax tricarinatus, subtuberculatus, lateribus subdilatatis rotundato angulatis, postice abdomen longissime superans; pedes graciles, tibiis posticis basi testaceo fascialis, tibiis quatuor anterioribus testaceo fasciatis, tarsis testaceis nigro bifasciatis; alæ posticæ diaphanæ.*

Male and female. Blackish, rather slender. Head not prominent, but with the two usual keels between the sockets of the antennæ. Eyes prominent, not rising higher than the vertex. Prothorax slightly tuberculate, with three well-defined keels; lateral keels rounded near the base of the fore wings; sides slightly dilated and forming a rounded angle; hind part lanceolate, compressed, extending for half its length beyond the tip of the abdomen. Legs slender; hind tibiæ with minute spines, with a testaceous basal band; tarsi testaceous, with two black bands; four anterior tibiæ with more or less distinct testaceous bands. Hind wings pellucid, with a brown streak along the apical part of the costa; veins black. Length of the body 5 lines; expansion of the hind wings 9 lines.

The abbreviated hind wings of T. spathulata, supposing that the description of that species is taken from fully-developed specimens, distinguish it from T. Australis.

a, *b*. South Australia. Presented by R. Bakewell, Esq.
c, *d*. Australia. From Major Parry's collection.

Country unknown.

94. Tettix Asmodœus.

Tetrix Asmodœus, *Serv. Hist. Orth.* 760.

95. Tettix simplex.

Fœm. *Ferruginea, gracilis, subtus fulva; caput nonnunquam testaceum; oculi verticem paullo superantes; prothorax subtuberculatus, subtricarinatus, spinis duabus lateralibus obliquis latis acutis, postice abdomen longissime superans; abdominis dorsum nigricans; pedes fulvi; alæ posticæ diaphanæ, striga costali fulva.*

Female. Ferruginous, slender, tawny beneath. Head sometimes testaceous, slightly prominent and with two keels between the sockets of the antennæ; these keels diverge slightly near their connection with the forked keel. Eyes prominent, rising a little higher than the vertex. Prothorax slightly tuberculate, with three slight keels; lateral keels interrupted and dislocated; two intermediate very short keels; on each side a large acute spine, which extends obliquely hindward; hind part lanceolate, compressed, extending for half its length beyond the abdomen, which is

blackish above. Legs tawny, slender; hind femora darker on the outer side; hind tibiæ with minute spines. Hind wings pellucid, with a tawny streak along the apical part of the costa; veins black. Length of the body 8—10 lines; expansion of the hind wings 15—18 lines.

The less acute spines of the prothorax distinguish it from *T. Sinensis* and from *T. cervina*.

a, *b*. ——— ?

96. Tettix latispina.

Mas. *Fulva, gracilis; caput nigricans, antice fulvo fasciatum; oculi verticem superantes; prothorax subtricarinatus, supra nigricans, spinis duabus lateralibus fulvis latis, postice abdomen longissime superans apicem versus fulvo fasciatum; pedes fusco fasciati; femoribus posticis subtus nigricante univittatis; alæ posticæ diaphanæ, fuscescente submarginatæ.*

Male. Tawny, slender. Head blackish, with a tawny band along the fore border of the eyes, and including the keels between the sockets of the antennæ. Eyes very prominent, rising higher than the vertex. Palpi tawny. Antennæ blackish, tawny towards the base. Prothorax blackish above, with two strongly marked transverse impressed lines, and with three slight keels; lateral keels interrupted near the fore border, slightly angular on each side near the base of the fore wing; a broad tawny spine on each side; hind part lanceolate, compressed, extending for half its length beyond the tip of the abdomen, paler, and with indistinct tawny bands towards its tip. Pectus and ventral segments black. Legs slender; femora and four posterior tibiæ with brown bands; hind femora with a blackish stripe beneath; fore tibiæ with two black bands. Hind wings pellucid, with a brown costal stripe, and with a pale brownish tinge along the exterior border; veins black. Length of the body 6 lines; expansion of the hind wings 10 lines.

The spines of the prothorax are broader than those of the preceding species.

a. ——— ?

97. Tettix ignobilis.

Fœm. *Fulva, gracilis; caput nigricans, verticem paullo superans, fronte longiuscula; prothorax subrugulosus, subtricarinatus, lateribus oblique dilatatis et rotundatis, postice abdomen longissime superans; pedes graciles, femoribus posticis subtus nigricante univittatis, tibiis tarsisque quatuor anterioribus fasciatis; alæ posticæ cinereæ.*

Female. Tawny, slender. Head blackish, prominent, and with two nearly parallel keels between the sockets of the antennæ, ascending a little higher than the prothorax; front rather long. Eyes livid, very prominent, a little higher than the prothorax. Ocelli white. Palpi tawny. Prothorax minutely and longitudinally rugulose, with three slight keels; lateral keels interrupted near the four border, slightly rounded near the base of each fore wing; sides obliquely dilated and rounded; hind part lanceolate, extending for half its length beyond the tip of the abdomen. Legs slender; hind femora with a blackish stripe beneath; four anterior tibiæ and tarsi with darker bands; hind tibiæ with very minute spines. Hind wings

cinereous; veins and costal streak black. Length of the body 7 lines; expansion of the hind wings 12 lines.

a. ——— ?

98. Tettix rudis.

Fœm. *Ferruginea, crassa, fortiter carinata; prothorax tuberculatus, tricarinatus, nigro bimaculatus, lateribus oblique dilatatis et rotundatis, postice abdomen sat superans; abdomen nigrum, fulvo maculoso vittatum; pedes nigro fasciati, femoribus subtus subdilatatis et subtuberculatis.*

Female. Ferruginous, thick. Head with a strongly-marked keel, whose divisions between the antennæ slightly diverge towards the forked keel of the front; a short keel on each side of the front. Eyes small, slightly prominent, not rising so high as the keel of the vertex. Prothorax tuberculate, with three keels; middle keel strongly marked near the fore border; lateral keels strongly marked in the middle part, disappearing towards the fore border; sides obliquely dilated and rounded; two transverse black spots at the base of the lanceolate part, which extends rather beyond the tip of the abdomen. Abdomen mostly black, with some stripes of tawny spots. Legs stout, with many black bands; femora slightly dilated, and with slight protuberances beneath. Hind tibiæ with short stout spines. Hind wings undeveloped. Length of the body $4\frac{1}{2}$ lines.

a. ——— ?

99. Tettix albescens.

Mas. *Albida, sat robusta; caput nigricans; oculi verticem paullo superantes; prothorax subtricarinatus, antice obscure cinereus, lateribus subdilatatis rotundato angulatis, postice obscure cinereus, abdomen longissime superans; pedes cinerei, nigricante fasciati; alæ posticæ cinereæ.*

Male. Whitish, moderately stout. Head blackish, hardly prominent in the space between the antennæ, which is occupied by two diverging keels; a short keel on each side of the front. Eyes very prominent, rising a little higher than the vertex. Prothorax dark cinereous about the fore border; three slight keels; lateral keels abbreviated towards the fore border, slightly rounded in the middle part; sides slightly dilated, and forming two oblique rounded angles; hind part lanceolate, compressed, extending very much beyond the tip of the abdomen, dark cinereous towards the tip. Abdomen and legs cinereous. Legs moderately stout; tibiæ, tarsi and four anterior femora with blackish bands. Hind tibiæ with very minute spines. Hind wings cinereous; veins black. Length of the body 5 lines; expansion of the hind wings 10 lines.

a. ——— ?

100. Tettix humeralis.

Mas. *Picea, sat gracilis; oculi verticem paullo superantes; prothorax subtuberculatus, subtricarinatus, lateribus oblique dilatatis, postice cervino marginatus, abdomen longissime superans; pedes sat robusti; alæ posticæ cinereæ.*

Male. Piceous, rather slender. Head small, slightly prominent between the sockets of the antennæ; keels as usual. Eyes very prominent, a little above the vertex and the prothorax. Prothorax slightly tuberculate, with three extremely slight keels; sides obliquely dilated; hind part lanceolate, compressed, bordered with fawn colour, extending for more than half its length beyond the tip of the abdomen. Legs moderately stout; hind tibiæ with very minute spines. Hind wings cinereous; veins black. Length of the body 4½ lines; expansion of the hind wings 12 lines.

a. ———?

101. Tettix latifera.

Fœm. *Picea, sat robusta; caput prothoracem paullo superans, antice fulvum; oculi vertivem paullo superantes; prothorax tuberculatus, subtricarinatus, lateribus dilatatis acute angulatis, postice abdomen longe superans; pedes fulvi, robusti, femoribus quatuor anterioribus dilatatis; alæ posticæ cinereæ.*

Female. Piceous, moderately stout. Head a little higher than the prothorax, slightly prominent between the eyes, tawny towards the base; keels as usual; front rather long. Eyes very prominent, a little higher than the vertex. Prothorax tuberculate, with three extremely slight keels; lateral keels disappearing in the fore part, rounded in the middle part; sides dilated and acutely angular; hind part lanceolate, extending much beyond the tip of the abdomen. Legs stout, tawny; four anterior femora dilated, and membranous above and beneath; hind tibiæ with short stout spines. Hind wings cinereous. Length of the body 6 lines; expansion of the hind wings 10 lines.

a. ———?

Genus 2. SCELYMENA.

Tetrix (Scelimena), *Serv. Hist. Orth.* 762—Scelymena, *Sauss. A. S. E. F. 4me Sér.* i. 480.

1. Scelymena producta.

Tetrix (Scelymena) producta, *Serv. Hist. Orth.* 762—Scelymena producta, *Sauss. A. S. E. F. 4me Sér.* i. 484—Acridium (Tetrix) productum, *Haan. Verz. Gesch. Ned. Ind. Bez. Ins.* 168.

Sumatra.

a, *b*. Java. From Mr. Melly's collection.

2. Scelymena harpago.

Tetrix (Scelimena) harpago, *Serv. Hist. Orth.* 763.

a. Hindostan. Presented by Sir W. Elliot.
b. S. Hindostan. Presented by M. J. Walhouse, Esq.
c. N. Hindostan. From Capt. Boyes' collection.
d. Hindostan. From Mr. Sowerby's collection.

3. Scelymena uncinata.

Tetrix (Scelimena) uncinata, *Serv. Hist. Orth.* 763.

Hindostan.

4. Scelymena hexodon.

Acridium (Tetrix) hexodon, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 168.

Sakoembang.

5. Scelymena bispinosa.

Acridium (Tetrix) bispinosum, *Dalm. Anal. Ent.* 86. *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 169.

Sumatra. Borneo. Japan. Two species?

6. Scelymena Gavialis.

Gavialis, *Sauss. A. S. E. F.* 4*me Sér.* i. 485.

Ceylon.

7. Scelymena Crocodilus.

Scelymena (Gavialidium) Crocodilus, *Sauss. A. S. E. F.* 4*me Sér.* i. 481.

Ceylon.

8. Scelymena Alligator.

Scelymena (Gavialidium) Alligator, *Sauss. A. S. E. F.* 4*me Sér.* i. 483.

Ceylon.

9. Scelymena nodosa.

Fœm. *Nigricans; oculi albidi, valde prominuli; prothorax subtricarinatus, lateribus dilatatis fulvis unispinosis, margine antico albido, postice lanceolatus, abdomen longissime superans; pedes sat graciles, femoribus dentatis, tarsis posticis basi tibiisque posticis membrana albida perangusta marginatis, tarsis posticis albido fasciatis; alæ posticæ cinereæ, margine exteriore nigricante.*

Female. Blackish, slender. Head very short, much narrower than the prothorax, with a slight keel, which is looped on the protuberance between the sockets of the antennæ and is forked towards the face. Eyes whitish, very prominent. Antennæ very slender. Prothorax dilated and armed with a tawny horizontal spine on each side, with a whitish fore border, with strongly-marked transverse impressed lines and with a very slight dorsal keel; lateral keels very slight, abbreviated towards the fore border, converging towards the tip; hind part lanceolate, very slender, extending for full half its length beyond the tip of the abdomen. Legs rather slender; femora with a few teeth beneath; hind tibiæ and first joint of hind tarsi with a very narrow whitish membrane on each side; hind tarsi with a whitish band. Fore wings rudimentary, with whitish tips. Hind wings cinereous, with a black costal stripe and with a blackish festooned exterior border. Length of the body 12 lines; expansion of the hind wings 21 lines.

The hind part of the prothorax is a little longer than that of S. harpago, and it has no tubercles on the dorsal keel; the membrane on the hind tibiæ is much shorter.

a. Ceylon. From Dr. Thwaites' collection.

10. Scelymena extensa.

Fœm. *Nigricans, graciles; frons subtuberculata; prothorax subtuberculatus, subtricarinatus, lateribus bispinosis, postice abdomen longissime superans; tibiæ tarsique postica albido marginata; alæ posticæ diaphanæ, iridescentes, nigricante submarginatæ.*

Female. Blackish, slender. Head small, prominent, and with the two usual keels between the sockets of the antennæ; front with a few very slight tubercles. Eyes very prominent. Antennæ very slender, longer than the breadth of the prothorax. Prothorax with a few very slight tubercles and with three very slight keels; fore part with two spines on each side (the hinder one curved and longer than the other) and with two transverse impressed lines; hind part lanceolate, compressed, very slender, extending for much more than half its length beyond the tip of the abdomen. Legs slender; hind tarsi towards the base and hind tibiæ with a narrow whitish membrane on each side. Hind wings pellucid, very iridescent, slightly and very narrowly blackish along the exterior border; costal stripe and veins black. Length of the body 13½ lines; expansion of the hind wings 24 lines.

a, *b*. Java. From Mr. Melly's collection.

11. Scelymena contracta.

Fœm. *Picea, crassa; caput lividum; prothorax bituberculatus, abdominis apicem longe superans, carina dorsali bene determinata; femora subtus dentata; tibiæ tarsique postica marginata; alæ minimæ.*

Female. Piceous, very stout. Head livid. Eyes whitish, prominent. Prothorax with a well-defined middle keel, and with two large tubercles on each side of the hind part, which is lanceolate and extends much beyond the tip of the abdomen. Legs stout; femora dentate beneath; hind tibiæ with a narrow tawny membrane on each side; hind tarsi with a testaceous membrane on each side towards the base and with a tawny band near the tip. Wings rudimentary. Length of the body 5½ lines.

a. Hindostan. Presented by Sir W. Elliot.

Genus 3. AMORPHOPUS.

Amorphopus, *Serv. Hist. Orth.* 756.

1. Amorphopus notabilis.

notabilis, *Serv. Hist. Orth.* 757, pl. 13, f. 2.

Cayenne.

2. Amorphopus Caiman.

Caiman, *Sauss. Rev. Zool.* xiii. 330.

Brazil.

3. Amorphopus Testudo.

testudo, *Sauss. Rev. Zool.* xiii. 330.

Guyana.

4. Amorphopus gibbosulus.

Mas. *Nigricans, robustus; caput inter antennas bicarinatus; antennæ gracillimæ, basi apiceque luteæ; prothorax rugosus, fortiter carinatus, antice luteo fasciatus, lateribus valde dilatatis acute angulatis, postice lanceolatus abdominis apicem attingens; femora quatuor anteriora subtus laminata; tibiæ posticæ subtus fulvæ.*

Male. Blackish, stout. Head very short, very much narrower than the prothorax, with a slight keel on the vertex, with two keels between the antennæ, and with an anterior keel which is forked towards the face. Eyes very prominent. Antennæ very slender, luteous at the base and towards the tips. Prothorax rugose, with a strongly-defined keel, and with a luteous band on the fore border; sides much dilated, acutely angular; hind part lanceolate, with a slight keel, extending to the tip of the abdomen. Legs short, stout; four anterior femora beneath with a slight notched membrane; hind femora very thick; hind tibiæ tawny beneath. Wings none. Length of the body 4 lines.

a. Rio Negro. From Mr. Wallace's collection.

Genus 4. CLADONOTUS.

Cladonotus, *Sauss. A. S. E. F.* 4*me Sér.* i. 478.

1. Cladonotus Humbertianus.

Humbertianus, *Sauss. A. S. E. F.* 4*me Sér.* i. 478.

Ceylon.

2. Cladonotus gibbosus.

Acridium (Tetrix) gibbosum, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 169, pl. 22, f. 14.

Japan.

3. Cladonotus horrendus.

Fœm. *Piceus, robustus; caput trispinosum; oculi valde prominuli; prothoracis carina fulva, fortis, inordinatim serrata, antice acute angulatus caput obtegens, postice longi-conicus, abdomen paullo superans, laminis duabus lateralibus fulvis bidentatis; femora quatuor anteriora valde dilatata; femora postica latissima extus latissima, extus subspinosa subtuberculata.*

Female. Piceous, stout, apterous. Head much narrower than the prothorax, with three spines on the vertex and with a protuberance between the sockets of the antennæ and a smaller protuberance near the face. Eyes very prominent. Antennæ very slender. Prothorax with a strongly-marked tawny irregularly serrated keel, which on the fore border terminates in an obliquely projecting spine which extends over the head; lateral keels apparent and undulating in the middle part; a tawny horizontal and directly projecting bidentate lamina on each side; hind part elongate-conical, extending a little beyond the tip of the abdomen. Legs short; four anterior femora much dilated; hind femora very broad, with a few spines and tubercles on the outer side; hind tibiæ with short stout spines on each side. Length of the body 4 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

4. Cladonotus Pelops.

Fœm. *Nigricans, robustus; vertex bispinosus; frons bituberculatus; prothorax rugosus, carina dorsali antice determinata, lateribus dilatatis quadrispinosis, postice abdominis apicem superans; femora dentata.*

Female. Blackish, stout. Head with a spine on each side of the vertex adjoining the eye; front with a tubercle on each side; two keels in the middle part; a single keel towards the vertex and a forked keel towards the face. Eyes extremely prominent. Antennæ very slender. Prothorax rugose, with a middle keel, which is most distinct in the fore part; sides dilated into membranes, each of which is armed with four spines; hind part lanceolate, extending somewhat beyond the tip of the abdomen. Legs stout; femora armed with teeth; hind tibiæ with very short spines. Wings rudimentary. Length of the body $3\frac{1}{2}$ lines.

a. Ceylon. Presented by Dr. Hooker.

5. Cladonotus turrifer.

Mas. *Piceus, robustus, apterus; caput subtuberculatum; oculi valde prominuli; prothorax tuberculatus, cornu longo dentato oblique ascendente ramum dentatum emittente armatus, postice abdominis apicem fere attingens; femora serrata, bispinosa; tibiæ tarsique postica fulvo bifasciata.*

Male. Piceous, stout, apterous. Head slightly tuberculate; the two keels between the sockets of the antennæ less approximate than in most species of the family; a more remote keel on each side. Eyes very prominent. Antennæ very slender. Prothorax tuberculate, forming in front a long compressed truncated obliquely ascending horn, which is more than twice as long as the breadth of the head and which is dentate in front and behind, and in front emits a dentate branch which is approximate to and extends over the vertex; middle keel distinct; hind part extending nearly to the tip of the abdomen, truncated and armed with two short spines at the tip. Femora serrated and armed with some very thick spines;

hind tibiæ and hind tarsi with two tawny bands. Length of the body 5 lines.

It may be distinguished from C. Humbertianus by the horn of the prothorax, which is not furcate at the tip.

a. Ceylon. From Mr. Roberts' collection.

6. Cladonotus securifer.

Fœm. *Nigricans, robustus, tuberculatus, apterus; oculi prominuli; prothorax antice fortiter carinatus cornu oblique ascendente armatus, postice abdominis apicem attingens; femora supra subtusque dentata.*

Female. Blackish, stout, tuberculate, wingless. Head with the usual structure; the two keels between the sockets of the antennæ far apart from each other; mouth tawny, smooth, shining. Eyes livid, prominent. Antennæ very slender. Prothorax deeply keeled in the fore part, ascending high and obliquely above the head; the lower part of the fore border of this protuberance extending more immediately over the vertex and armed with two obtuse spines; hind part lanceolate, with a slight keel and with three or four transverse irregular ridges, obtuse at the tip, extending to the tip of the abdomen. Legs stout; femora dentate above and beneath; hind tibiæ with short stout spines. Length of the body 7½ lines.

a. Philippine Isles. From Mr. Cuming's collection.

7. Cladonotus cristicornis.

Mas. *Niger, robustus; caput antice unidentatum, fronte rugosa; prothorax tuberculatus, fortiter carinatus, medio gibbosus, antice cornu dentato oblique ascendente armatus, postice abdominis apicem attingens; femora supra subtusque dilatata et tuberculata; tibiæ intermediæ apud medium subdilatatæ.*

Male. Black, stout. Head dentate near the tip of the vertex; front rugose. Eyes not prominent. Prothorax largely tuberculate, with a strongly-marked unequally dentate keel, which in front is prolonged into an obliquely ascending horn or crest, which is armed with several teeth and extends over the head; middle part gibbous on each side of the keel; hind part extending to the tip of the abdomen. Legs stout, setose; femora dilated and tuberculate above and beneath; middle tibiæ slightly dilated in the middle; hind tibiæ with very short spines. Length of the body 6 lines.

a. Philippine Isles. From Mr. Cuming's collection.

8. Cladonotus horridus.

Fœm. *Piceus, aspere rugosus et tuberculatus; vertex longitudinaliter quadrispinosus; frons spinis duabus furcatis armata; oculi subpetiolati, verticem superantes; prothorax spinoso dilatatus, postice lanceolatus, abdomen paullo superans, carina dentata spinosa; femora incrassata, spinosa; tibiæ quatuor anteriores subdilatatæ.*

Female. Piceous, roughly rugose and tuberculate. Head with four spines in a longitudinal line on the vertex and with a forked spine on each side of the front. Eyes very prominent, slightly petiolated, higher than the vertex. Prothorax with a dentate and spinose keel; middle part much dilated and armed with spines on each side; sides dilated and bidentate; hind part lanceolate, extending a little beyond the tip of the abdomen. Legs stout; femora incrassated, irregularly spinose; four anterior tibiæ slightly dilated; hind tibiæ armed with stout spines. Length of the body $4\frac{1}{2}$—5 lines.

a—c. Natal. From M. Gueinzius' collection.

Genus 5. TRIPETALOCERA.

Tripetalocera, *Westw. Zool. Journ.* v. 444.

1. Tripetalocera ferruginea.

ferruginea, *Westw. Zool. Journ.* v. 444, pl. 22, f. 3—Acrida (Tetrix) ferruginea, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 186, pl. 22, f. 11.

Banjermassing.

Genus 6. PAULINIA.

Paulinia, *Blanch. Voy. Orb.* ii. 216.

1. Paulinia muscosa.

muscosa, *Blanch. Voy. Orb.* ii. 216, pl. 27, f. 6.

Bolivia.

Genus 7. CHORIPHYLLUM.

Choriphyllum, *Serv. Hist. Orth.* 754.

1. Choriphyllum rhombeum.

———, *Baker, Phil. Trans.* 2, iv. (1764) 55, pl. 6—Cicada rhombea, *Linn. Syst. Nat.* i. 2, 704. *Fabr. Syst. Rhyn.* 7—Acridium compressum, *Thunb. N. Act. Upsal.* 1815, 162—Choriphyllum Sagrai, *Serv. Hist. Orth.* 755, pl. 8, f. 5—Acridium (Hymenotes) rhombeum, *Haan, Verz. Gesch. Ned. Ind. Bez. Ins.* 165.

a. Jamaica.

2. Choriphyllum plagiatum.

Fœm. *Testaceum, apterum; antennæ longissimæ, gracillimæ; prothoracis crista nigro maculata, margine subangulato subundulato; femora quatuor anteriora subtus bidentata.*

Female. Testaceous or dead-leaf colour, wingless. Antennæ very long and slender. Crest of the prothorax foliaceous, extending much beyond the head and the tip of the abdomen, adorned with various black spots of different size and shape; its edge slightly undulating, forming at

a little behind the middle a rounded angle. Legs slender; four anterior femora bidentate beneath; hind tibiæ with very short spines. Length of the body 5½ lines.

a. Jamaica. From Mr. Gosse's collection.

Genus 8. HYMENOTES.

Hymenotes, *Westw. Mag. Nat. Hist.* iii. 493.

1. Hymenotes triangularis.

triangularis, *Westw. Mag. Nat. Hist.* iii. 493, pl. 67, f. 3.

a, *b*. Philippine Isles. From Mr. Cuming's collection.
c. ——? From Mr. Argent's collection.

2. Hymenotes platycorys.

platycorys, *Westw. Mag. Nat. Hist.* iii.

a, *b*. Sierra Leone. Presented by the Rev. D. F. Morgan.
c, *d*. Sierra Leone. From Mr. Foxcroft's collection.
e. Sierra Leone. From Mr. Salmon's collection.
f. Dix Cove, West Africa. From Major Parry's collection.
g. West Africa. From Mr. Vigors' collection.

3. Hymenotes arcuata.

Acridium (Hymenotes) arcuatum, *Haan*, *Verz. Gesch. Ned. Ind. Bez. Ins.* 166, pl. 22, f. 8.

New Guinea.

a. Mysol. From Mr. Wallace's collection.
b. Aru Islands. From Mr. Wallace's collection.

Genus 9. OPHIOTETTIX.

Fœm. Corpus gracile, læve, longi-fusiforme, apterum. Caput longissimum, oblique ascendens, fere cylindricum, prothoracem longe superans. Oculi valde prominuli. Antennæ longissimæ, gracillimæ, 12-articulatæ?; articuli quatuor apicales dilatati. Prothorax subtricarinatus, postice lanceolatus, abdominis apicem attingens. Pedes longi, graciles.

Female. Body slender, smooth, elongate-fusiform, wingless. Head very long, obliquely ascending, rising much higher than the prothorax, forming a nearly cylindrical horn, which bears on its tip the very prominent eyes. Antennæ 12-jointed?, very long and slender; ninth and tenth joints dilated and lanceolate above; eleventh and twelfth slightly dilated. Prothorax with the usual transverse impressed lines and with three very slight keels; hind part lanceolate, extending to the tip of the abdomen. Legs long, slender.

1. Ophiotettix cygnicollis.

Fœm. *Picea; antennarum articuli quatuor apicales nigri; prothorax cervino trivittatus; pedes ferruginei.*

Female. Piceous. Eyes whitish. Antennæ with the four apical joints black. Prothorax with three fawn-coloured stripes, which include the keels. Legs ferruginous. Length of the body $7\frac{1}{2}$ lines.

a. Dorey, New Guinea. From Mr. Wallace's collection.

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SUPPLEMENT

TO THE

CATALOGUE OF BLATTARIÆ.

The following synoptical arrangements of the families and genera and of some of the species in this tribe are translated from M. Brunner de Wattenwyl's work.

A. Femora not armed with spines.
a. Claws with no arolium.
* Supra-anal lamina in both sexes quadrate, notched. - BLABERIDÆ.
** Supra-anal lamina in both sexes transverse, rounded, entire. - - - - - PANESTHIDÆ.
b. Claws with an arolium.
* Fore part of the hind wings acuminated or furnished with a triangular folded apical area. - - - - - CHORISONEURIDÆ.
** Fore part of the hind wings rounded, with no apical area.
† Anal area of the hind wings folded.
‡ Supra-anal lamina of the female quadrate, notched or entire. Hind angles of the abdominal segments elongated. - - - PANCHLORIDÆ.
‡‡ Supra-anal lamina of the female rounded. Hind angles of the abdominal segments not elongated. - - - - PERISPHÆRIDÆ.
†† Anal area of the hind wings not folded.
‡ Supra-anal lamina of the female rounded. - - CORYDIDÆ.
‡ Supra-anal lamina of the female quadrate, notched in the middle. - - - HETEROGAMIDÆ.
B. Femora armed with spines.
a. Apical ventral segment of the female ample, flat, with no subgenital lamina.
* Supra-anal lamina of the male and female transverse, very narrow. - - - - ECTOBIDÆ.
** Supra-anal lamina of the male and female more or less elongated, triangular, or notched, or lobate.

† Supra-anal lamina of the male and female triangular, entire or slightly notched. - PHYLLODROMIDÆ.
†† Supra-anal lamina of the male more or less quadrate; that of the female with rounded lobes, or entire broad and rounded - - - - - - EPILAMPRIDÆ.
b. Apical ventral segment of the female with valves. - - - - - PERIPLANETIDÆ.

In the Heterogamidæ there are exceptions to this arrangement; the females have no arolium between the claws, and such is the case with the males also of Heterogamia Algerica and of Homœogamia Mexicana.

Page 1.

Fam. 1. BLABERIDÆ.

A. Hind border of the prothorax curved. - - BLABERA.
B. Hind border of the prothorax triangular. - - MONACHODA.

BLABERA GIGANTEA.

It may be said that several species have been included with this name, but its limits can hardly be ascertained till many specimens have been examined. The specimen from Para agrees with Stoll's figure, pl. 1 d. f. 2, but the sides of the prothorax are less dilated, the fore border is more rounded, the black shield-like patch in the disk contains no pale marks, slightly decreases in breadth hindward, and extends quite to the hind border. The first joint of the antennæ is about four times longer than the breadth of the space between the eyes. In the specimen from Rio Negro the prothorax is like that of Stoll's figure; the patch on the thorax includes no pale marks, its sides are undulating, as described by De Wattenwyl, but they are not represented so by Stoll; the space between the eyes is a little less than the length of the first joint of the antennæ; the fore wings are more rounded at the tips than those of Stoll's fig. 1, and of the specimen from Para. The specimen from Demerara agrees with Stoll's fig. 2 as regards the prothorax; the patch comes near to the hind border; it contains some tawny spots, which are not represented by Stoll, but nearly agree with those mentioned by De Wattenwyl; there is a testaceous stripe on the front, which is not the case in the specimen from Para nor in that from Rio Negro; the first joint of the antennæ is nearly four times longer than the breadth between the eyes. The specimen from Tejuca has the prothorax more dilated than it is in the examples from Demerara and from Rio Negro, and still more than in that from Para, with which it agrees in the black patch on the thorax; the fore wings are more rounded at the tips than in the specimen from Para; the space between the eyes is less than half the length of the first joint of the antennæ. In the specimen from Chontales the fore wings are more narrowed at the tips than in that from Para, and still more than in those of the other three examples before mentioned; the form of the prothorax and its mark are as in the Para specimen; the first joint of the antennæ is four times longer than the breadth between the eyes; the legs, except the coxæ, are black; the hind femora have a testaceous stripe; the brown mark on the left fore wing is

much larger than that in the Para individual; it is nearly allied to B. quadrifera, but the fore wings are longer and narrower at the tips.

Page 2.

Blabera Mexicana.

The specimen there recorded agrees, as regards the fore wings, with de Wattenwyl's description of B. trapezoidea; the ventral segments and the legs are black, each of the former has an abbreviated luteous band and on each side a luteous spot; the breadth between the eyes is full half the length of the first joint of the antennæ.

Page 9.

Blabera Claraziana.

ligata, *C. D.* i. 119.

The specimen recorded as B. dubia is very nearly allied to this species, but it has the sides of the prothorax less dilated and the black patch of the disk does not extend to the hind border.

a—c. Buenos Ayres. From M. Brunner de Wattenwyl's collection.

Blabera marmorata.

b. Chontales, Nicaragua. From Mr. Janson's collection.

Page 11.

Monachoda laticollis.

a. Bahia. From M. Brunner de Wattenwyl's collection.

Page 13.

Fam. 2. POLYPHAGIDÆ.

Male.—Winged. Claws with an arolium. *Female.*—Winged or wingless. Claws with no arolium. - Polyphaga.
Male and Female.—Winged. Claws with no arolium. Homœogamia.

Polyphaga Syriaca.

conspersa, *C. D.* i. 120.

Page 15.

Homœogamia Mexicana.

a—c. Mexico. From M. Brunner de Wattenwyl's collection.

Polyphaga æqualis.

Mas. *Picea; caput nigrum, antice rufum; prothorax scaber, transverse ellipticus, antice rufo marginatus; pectus, pedes, abdominis latera et segmentorum margines postici fulva; alæ anticæ testaceo guttatæ, abdomen longe superantes; alæ posticæ diaphanæ.*

Male. Piceous. Head black; clypeus, palpi and antennæ red. Prothorax scabrous, transversely elliptical; anterior half of the border red; some longitudinal impressed lines in the disk. Pectus, legs, sides of the abdomen and hind borders of the segments tawny; femora setose beneath. Fore wings extending for full half the length beyond the abdomen, with numerous minute pale testaceous dots, occasionally with a large pale testaceous patch in the disk near the base. Hind wings pellucid; veins pale. Length of the body 8—9 lines; expansion of the fore wings 28—30 lines.

The prothorax is regularly elliptical, and thus differs from that of P. Mexicana, in which the hind part is broader than the fore part, and is truncated on each side.

a—b. South Mexico. From Mr. Janson's collection.

HOMŒOGAMIA SINENSIS.

Sinensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 282.

Pekin, North China.

Page 20.

Fam. 3. PANESTHIDÆ.

A. Male and female winged.
a. Legs thick. - - - - - PANESTHIA.
b. Legs slender. - - - - - PARANAUPHŒTA.
B. Fore wings lobiform. No hind wings. - - PARAHORMETICA.
C. Male and female wingless. - - - DASYPOSOMA.

Genus 1. PANESTHIA.

A. Supra-anal lamina dentate. - Morio, Javanica, serratissima, angustipennis, transversa.
B. Supra-anal lamina entire. - - - - Australis.

PANESTHIA JAVANICA.

cribrata, *C. B.* 24.

Page 24.

PANESTHIA SERRATISSIMA, *C. D.* i. 120.

This seems to be a variety of P. Morio, in which the subanal lamina is in some cases distinctly dentate, in others hardly dentate.

a—c. Ternate. From M. Brunner de Wattenwyl's collection.

PANESTHIA AUSTRALIS, *C. D.* i. 120.

a, b. Port Denison. From M. Brunner de Wattenwyl's collection.
c. South Australia. Presented by R. Bakewell, Esq.

Panesthia Morio.

regina, *C. B.* 20.

Panesthia forceps.

forceps, *Sauss. Mém. Soc. Phys. Gen.* xx. 287, pl. 3, f. 24.

Pondicherry.

Genus PARANAUPHŒTA, *C. D.* i. 122.

A. Disk of the prothorax of one colour.
a. Fore wings with one spot. - - - - basalis.
b. Fore wings with two spots. - - - circumdata.
c. Fore wings with four spots. - - - - rufipes.
B. Disk of the prothorax striped.
a. Fore wings spotted. - - - - - lyrata.
b. Fore wings of one colour. - - - - bilunata.

Paranauphœta rufipes, *C.* D. i. 122.

a. Moluccas. From M. Brunner de Wattenwyl's collection.

Paranauphœta limbata.

limbata, *Sauss. Mém. Soc. Phys. Gen.* xx. 288.

Hindostan.

Genus PARAHORMETICA, *C. D.* i. 124.

A. Legs testaceous. - - - - tumulosa.
B. Legs black. - - - - - monticollis.

Parahormetica bilobata.

Brachycola bilobata, *C. B.* 55—Parahormetica tumulosa, *C. D.* i. 124.

Parahormetica Bengalensis.

Bengalensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 284.

Bengal.

Genus DASYPOSOMA, *C. D.* i. 124.

A. Abdomen black. - - - - - - nigra.
B. Abdomen brown.
a. Body of two colours. - - - - - bicolor.
b. Body of two colours. - - - - punctulata.

Dasyposoma castanea.

castanea, *Sauss. Mém. Soc. Phys. Gen.* xx. 285.

Australia.

Page 25.

Archiblatta Hœvenii.

Planetica Aranea, *C. B.* 25.

Tribe 2. MUTICÆ.

Fam. 2. PANCHLORIDÆ.

A. Male and female winged.
a. Prothorax not rhombical.
* Hind border of the prothorax rounded.
† Antennæ more than half the length of the body. Hind section of the prothorax twice larger than the fore section. Legs much compressed. Fore wings broader at the base; mediastinal vein angular. - - Gyna.
†† Antennæ not more than half the length of the body. Fore section of the prothorax twice larger than the hind section. Legs slender. Fore wings linear; mediastinal vein straight. - - - Panchlora.
** Hind border of the prothorax straight. - - Nauphœta.
b. Prothorax rhombical.
* Head wholly concealed by the prothorax. Fore wings very broad at the base. - - - - Zetobora.
** Head not wholly concealed by the prothorax. Fore wings contracted at the base. - - - Philobora.
B. Male winged. Female wingless. Prothorax extending very much beyond the head.

The antennæ of Panchlora Maderæ are more than half the length of the body.

Genus GYNA, *C. D.* i. 121.

Gyna æstuans.

Panchlora æstuans, *C. B.* 30.

Gyna fervida.

Panchlora fervida, *C. B.* 30.

Gyna Africana.

Panchlora Africana, *C. B.* 30—Gyna pomposa, *C. D.* i. 121.

Page 27.

Panchlora nivea.

luteola, *C. B.* 30.

a, *b*. Mexico. From M. Brunner de Wattenwyl's collection.

Page 36.

PANCHLORA OCCIPITALIS.

Fœm. *Testacea, fusiformis; caput prothoracem paullo superans, fascia verticis fronte facieque nigris; prothorax niger, punctatus, margine antico lateribusque anticis pallide testaceis; abdominis dorsum piceum, segmentis testaceo marginatis; pedes breves, robusti; alæ anticæ fulvæ, abdomen non superantes, striga subcostali nigra; alæ posticæ cinereæ.*

Female. Testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; a broad black band on the vertex; front and face with a black disk; vertex broad between the eyes. Antennæ piceous, shorter than the body, testaceous at the base. Prothorax black, transverse, thinly punctured, widening hindward; fore border slightly truncated; sides and hind border much rounded; fore border and sides, excepting the hind part, pale testaceous. Abdomen piceous above, excepting the hind borders of the segments. Legs short, stout. Wings not extending beyond the abdomen. Fore wings tawny, with a black subcostal streak. Hind wings cinereous. Length of the body 8 lines; expansion of the fore wings 14 lines.

a. Bombay. Presented by Dr. Leith.

PANCHLORA SUBMARGINATA.

Mas. *Picea, fusiformis, subtus testacea, caput prothoracem perpaullo superans; prothorax transverse subellipticus, oblique bisulcatus, testaceo antice bistrigatus; venter apice piceus; circi breves; pedes breves, robusti, tibiis tarsisque quatuor anterioribus fulvis; alæ abdomen longe superantes.*

Fœm.? *Nigra, ovata, aptera, subtus fulva; abdomen subtiliter tuberculatum; pedes fulvi, tibiis tarsisque piceis.*

Male. Piceous, fusiform, smooth, shining, testaceous beneath. Head extending very little beyond the prothorax; fore border of the clypeus and sockets of the antennæ testaceous. Eyes remote. Antennæ tawny. Prothorax transversely subelliptical, with an oblique furrow on each side in the disk; a testaceous streak along each side of the fore border, which is slightly truncated; sides much rounded; hind border slightly rounded. Abdomen piceous beneath at the tip. Cerci short. Legs short, stout; femora with bristles beneath; four posterior tibiæ and tarsi tawny. Wings extending much beyond the abdomen, alike in colour. Length of the body 8 lines; expansion of the hind wings 21 lines.

Female? Black, oval, wingless, tawny beneath. Abdomen, except at the base, minutely tuberculate. Legs tawny; tibiæ and tarsi piceous. Length of the body 7 lines.

a. Bombay. Presented by Dr. Leith.

Page 45.

ZETOBORA MAXIMILIANI.

Maximiliani, *Sauss. Rev. Zool.* xx. 357.

Mexico.

Page 46.

ZETOBORA PATULA.

Mas. *Ferruginea, opaca, subtiliter punctata, subtus testacea nitens; caput nigrum; prothorax latissimus, caput longe superans, postice nigricans, margine antico valde rotundato, lateribus rotundato angulatis, margine postico subrotundato; venter tuberculis lateralibus nigricantibus; alæ anticæ latæ, abdomen sat superantes, costa convexa; alæ anticæ nigro venosæ, basi nigræ, apices versus angustatæ, abdomen superantes, costa basi rotundata.*

Male. Ferruginous, dull, finely punctured, testaceous, smooth and shining beneath. Head and antennæ black, the latter much shorter than the body. Eyes tawny, prominent; a narrow space between them. Prothorax extending much beyond the head, about twice as broad as long, forming a rounded angle on each side; hinder part blackish, with some ferruginous spots on each side; fore border much rounded; hind border slightly rounded. Abdomen beneath with blackish knobs along each side. Legs testaceous, short, stout; tibiæ with short stout spines. Wings extending somewhat beyond the abdomen. Fore wings extending much beyond the sides of the abdomen; costa rounded. Length of the body 14 lines; expansion of the fore wings 32 lines.

This species and Z. cicatricosa agree in having a very broad prothorax, but the description of the latter is not sufficient to identify them.

a. Chontales, Nicaragua. From Mr. Janson's collection.

ZETOBORA PHORASPOIDES.

Mas. *Nigra, nitens; caput antice fulvo unifasciatum; antennæ submoniliformes, corpore multo breviores; prothorax tuberculatus, caput vix superans, sulcis duabus discalibus obliquis, fascia antica testacea apud medium contracta, margine antico undulato, lateribus subangulatis; scutellum testaceum; pectus testaceo oblique strigatum; venter testaceo subtrifasciatum.*

Male. Black, shining. Head and under side smooth. Head with a tawny band near the mouth. Eyes tawny; space between them moderately broad. Antennæ submoniliform, rather stout, much shorter than the body. Prothorax tuberculated, hardly extending beyond the head, with two broad oblique furrows, which converge hindward; fore border undulating, incurved on each side, the middle part with a testaceous band, which is contracted in the middle; sides slightly angular; hind border slightly truncated. Scutellum testaceous. Pectus with testaceous oblique streaks on each side. Abdomen beneath with three short testaceous bands. Legs short, stout; femora with a row of fine bristles beneath; tibiæ with short

stout spines. Wings testaceous, extending somewhat beyond the abdomen. Fore wings with a rounded costa, and much overlapping the sides of the body towards the base, contracted and hardly overlapping the body towards the tips; disk and costa black towards the base; veins black, except along the costa. Length of the body 14 lines; expansion of the fore wings 32 lines.

The black hue of the fore wings towards the base distinguishes this species from Z. nimbata, which seems to be nearly allied to it.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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ZETOBORA CASTANEA.

Nimbata? *C. B.* 52.

Page 58.

Fam. CORYDIDÆ.

A. Fore wings not parallel.
a. Fore wings not dilated towards the tips.
* Antennæ moniliform. - - - - CORYDIA.
** Antennæ filiform.
† Fore wings wholly coriaceous. - - EUTHYRHAPHA.
†† Fore wings membranaceous and pellucid towards the tips. - - - - - - HOLOCOMPSA.
††† Fore wings wholly pellucid. - - - DIAPHANA.
b. Fore wings dilated towards the tips. - - MELESTORA.
B. Fore wings parallel. - - - - LATINDIA.

Page 59, *C. B.*

CORYDIA ORNATA.

Melestora ornata, *C. B.* 60.

Hindostan.

LATINDIA MEXICANA.

Mexicana, *Sauss. Rev. Zool.* xx. 100.

Mexico.

Page 62.

Fam. 6. CHORISONEURIDÆ, *C. D.* i. 126.

Hypnormidæ, page 62.

A. No apical area. - - - - - OXYHALOA.
B. Hind wings with an apical area.
a. Apical area not more than a third of the wing in length, with no veinlets.
* Fore wings with a distinct anal vein.
† Scapular vein of the fore wings pinnatino ramose; axillary veins distinct - - - - CHORISONEURA.

†† Scapular vein of the fore wings furnished with branches parallel to the longitudinal axis; axillary veins indistinct. - - - - - AREOLARIA.
** Fore wings with no anal vein.
† Prothorax transverse, rounded behind. Fore wings broad, very convex. - - - - CASSIDODES.
†† Prothorax subquadrate, truncate behind. Fore wings narrow, depressed. - - - - HYPNORMA.
b. Apical area triangular, half the length of the wing, very thickly veined. - - - - ELEUTHERODA.

CHORISONEURA.

A. Fore wings pale ferruginous or pale brown.
a. Antennæ of two colours. - - - - nigrifrons.
b. Antennæ of one colour.
* Antennæ yellow. - - - - - flavo-antennata.
** Antennæ black. - - - - - discoidalis.
c. Antennæ? - - - - - - mysteca.
B. Fore wings pale, speckled with brown. - - sordida.

CHORISONEURA SURINAMA.

Surinama, *Sauss. Rev. Zool.* xx. 100.

Surinam.

CHORISONEURA PELLUCIDA.

Blatta pellucida, *Sauss. C. B.* 92.

CHORISONEURA TRANSLUCIDA.

Blatta translucida, *C. B.* 92.

Page 63.

Fam. EPILAMPRIDÆ.

A. Fore wings fully developed.
a. Antennæ incrassated, hirsute. Fore wings sericeous. PARATROPA.
b. Antennæ setaceous. Fore wings smooth.
* Fore wings convex, corneous.
† Prothorax rhomboidal. Fore wings above with no veins. - - - - - - PHORASPIS.
†† Prothorax truncate behind. Fore wings with distinct veins above. - - - - - PARAPHORASPIS.
** Prothorax extending over the scutellum. Fore wings coriaceous or somewhat corneous, with distinct veins.
† Inframedial vein of the hind wings with obliqne pennate branches. - - - - EPILAMPRA.
†† Inframedial vein of the hind wings with furcate and not parallel branches. - - - HOMALOPTERYX.
B. Fore wings abbreviated or scale-shaped. Prothorax truncate behind. - - - - - OPISTHOPLATIA.

PHORASPIS LUCTUOSA.

luctuosa, *Sauss. Rev. Zool.* xx. 356.

Surinam.

Page 65.

Genus PARAPHORASPIS, *C. D.* i. 127.

Phlebenotum, *C. B.* 65.

1. PARAPHORASPIS ANOMALA.

Phlebenotum anomalum, *C. B.* 65—Paraphoraspis anomala, *Sauss. Mém. Soc. Phys. Gen.* xx. 264.

Genus THORAX.

Sect. Thorax, *Sauss.*

THORAX PORCELLANA.

Phoraspis porcellana (*Sauss.*), *C. B.* 65—Phlebenotum notatum, *C. D.* i 127.

Page 68.

EPILAMPRA CRIBOSA.

agathina, *C. B.* 69.

Page 69.

EPILAMPRA MEXICANA.

a. Venezuela. From M. Brunner de Wattenwyl's collection.

Page 70.

EPILAMPRA CROCEA.

Nauphœta testacea? *C. D.* i. 122.

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EPILAMPRA INQUINATA.

nudiventris, *C. B.* 76.

EPILAMPRA VERTICALIS.

bella, *C. B.* 70.

a. Brazil. From M. Brunner de Wattenwyl's collection.

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For EPILAMPRA MEDIVENTRIS *read* EPILAMPRA NUDIVENTRIS

EPILAMPRA FORNICATA.

gracilis, *C. D.* i. 128.

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EPILAMPRA MELANOSOMA.

melanosoma, *Sauss. Mém. Soc. Phys. Gen.* xx. 266—proxima? *C. D.* i. 128.

Hindostan.

EPILAMPRA OLIVACEA.

olivacea, *Sauss. Mém. Soc. Phys. Gen.* xx. 267.

Cochin China.

EPILAMPRA MANILIENSIS.

Maniliensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 268.

Manilla.

EPILAMPRA JAVANICA.

Javanica, *Sauss. Mém. Soc. Phys. Gen.* xx. 269.

Java.

EPILAMPRA GRACILIS, *C. D.* i. 128.

a, *b*. Australia. From M. Brunner de Wattenwyl's collection.

EPILAMPRA AZTECA.

Azteca, *Sauss. Rev. Zool.* xx. 356.

Mexico. Cuba.

EPILAMPRA CRASSA.

crassa, *Sauss. Rev. Zool.* xx. 99.

Mexico.

EPILAMPRA BLABEROIDES.

Mas et fœm. *Picea, subtus ferruginea; antennæ corpore paullo longiores; prothorax transverse ellipticus, litura discali scutiformi; femora spinulosa; arolia minima; alæ abdomen longe superantes.* Mas.—*Caput prothoracem non superans.* Fœm.—*Caput prothoracem paullo superans.*

Male and female. Piceous, ferruginous beneath. Head concealed by the prothorax in the male, extending a little beyond it in the female. Eyes remote. Palpi subclavate; second joint shorter than the first and than the third. Antennæ setose, a little longer than the body. Prothorax large, transversely elliptical; a scutcheon-shaped mark in the disk, including a small cavity on each side. Supra-anal lamina notched. Femora with a row of small spines; tibiæ with stout spines; arolia extremely minute. Fore wings coriaceous, extending for about two-fifths of their length beyond the abdomen. Hind wings like the fore wings in

colour. Length of the body 21—26 lines; expansion of the fore wings 70 lines.

This species far exceeds in size all the other Epilampræ, and may be considered as the type of a new genus.

a, *b*. Chontales, Nicaragua. From Mr. Janson's collection.

Panchlora signatura.

Fœm. *Testacea, longissime ovata; caput fascia inter oculos nigra lata, fascia anteriore maculisque duabus adhuc anterioribus piceis; prothorax disco fuscescente testaceo-liturato, vittis duabus lateralibus bis oblique interruptis; abdomen disco dorsali vittisque duabus ventralibus latis fuscis; alæ cinereæ, abdomen non superantes, venulis transversis fusco nebulosis.*

Female. Testaceous, very elongate-oval, smooth, shining. Head extending very little beyond the abdomen, with a broad black band between the eyes, with an irregular piceous band between the sockets of the eyes, and with a piceous spot on each side of the front. Antennæ piceous, testaceous at the base. Prothorax transverse, narrower in front, with a brownish disk which includes several testaceous marks; a black stripe on each side, interrupted in the fore part by two oblique testaceous lines; fore border, sides and hind border very slightly rounded. Abdomen with a brown disk; under side with a broad brown stripe on each side. Legs short, thick; tibiæ with black spines. Wings cinereous, extending to the tip of the abdomen; transverse sectors clouded with brown. Length of the body 11 lines; expansion of the fore wings 22 lines.

The hind border of the prothorax is less elongated than that of E. pardalina. It has more resemblance to E. atomifera, but the prothorax is less ample.

a. St. Helena. Presented by J. C. Melliss, Esq.

Homalopteryx regina.

Epilampra (Homalopteryx) regina, *Sauss. Mém. Soc. Phys. Gen.* xx. 270.

Cochin China.

Homalopteryx pectinata.

Epilampra (Homalopteryx?) pectinata, *Sauss. Mém. Soc. Phys. Gen.* xx. 271.

Australia.

Genus HYPOCRITA.

Hypocrita, *Sauss. Rev. Zool.* xx. 99.

1. Hypocrita unicolor.

unicolor, *Sauss. Rev. Zool.* xx. 100.

Buenos Ayres.

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Fam. ECTOBIDÆ.

A. Fore wings coriaceous. Hind wings partly developed.
a. Triangular area of the hind wings small.
* Scapular and interno-median veins of the fore wings united at the base, emitting branches towards the sutural margin. - - - - Ectobia.
** Scapular and interno-median veins of the fore wings divided at the base, the former simple, the latter emitting parallel branches towards the tip. - - - - - Theganopteryx.
b. Triangular area of the hind wings large, reflexed. - Anaplecta.
B. Fore wings corneous, as long as the abdomen, or squamiform, with no scapular vein. Hind wings rudimentary or none. - - - - Aphlebia.

Genus ECTOBIA.

A. Scapular and interno-median veins of the fore wings united at the base, emitting branches towards the sutural margin.
a. Body black. - 1. Lapponica. 2. albicincta. 3. flavocincta.
b. Body pale. 4. vittiventris. 5. ericetorum. 6. livida. 7? marcida.
B. Scapular and interno-median veins of the fore wings divided at the base, the former simple, the latter emitting parallel veins towards the tip. Theganopteryx, *Watt.* - - - - 9. lucida.

Group PSEUDECTOBIA, *Sauss. Mém. Soc. Phys. Gen.* xx. 234.

A. Prothorax brown, with two oblique pale stripes. - - Luneli.
B. Prothorax without stripes.
a. Branches of the discal vein turned aside by the apical triangle. - - - - - insularis.
b. Branches of the discal vein truncated by the apical triangle. - - - - - liturifera.

Genus THEGANOPTERYX.

A. Hind wings with a bifurcate humeral vein.
a. Prothorax elliptical. - - - - - Indica.
b. Prothorax parabolical or trapeziform.
* First axillary vein emitting five or six branches. - Senegalensis.
** First axillary vein emitting three branches. - - jucunda.
B. Hind wings with an entire humeral vein. - - fallax.

Ectobia Luneli.

Blatta Luneli, *Sauss. Rev. Zool.* xx. 355—Ectobia (Pseudectobia) Luneli, *Sauss. Mém. Soc. Phys. Gen.* xx. 235.

Hindostan.

Ectobia liturifera.

liturifera, *C. B.* 93—Ectobia (Pseudectobia) liturifera? *Sauss. Mém. Soc. Phys. Gen.* xx. 236, pl. 3, f. 17.

Ectobia insularis.

Ectobia (Pseudectobia) insularis, *Savss. Mém. Soc. Phys. Gen.* xx. 237.

Isle of France.

Genus THEGANOPTERYX.

Theganopteryx jucunda.

Ectobia (Theganopteryx) jucunda, *Sauss. Mém. Soc. Phys. Gen.* xx. 232.

Hindostan.

Theganopteryx fallax.

Ectobia (Theganopteryx) fallax, *Sauss. Mém. Soc. Phys. Gen.* xx. 233.

Mexico?

Theganopteryx Senegalensis.

Blatta Senegalensis, *Sauss. Rev. Zool.* xx. 354—Ectobia (Theganopteryx) Senegalensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 231.

Senegal.

Theganopteryx Indica.

Ectobia (Theganopteryx) Indica, *Sauss. Mém. Soc. Phys. Gen.* xx. 230, pl. 3, f. 16.

Bombay.

Genus ANAPLECTA.

A. Body testaceous. - - - dorsalis, bivittata, unicolor.
B. Body brown. - minutissima, lateralis, ? fulgida, ? parvula.

Anaplecta Mexicana.

Mexicana, *Sauss. Rev. Zool.* xx. 97.

Mexico.

Anaplecta Azteca.

Azteca, *Sauss. Rev. Zool.* xx. 97.

Mexico.

ANAPLECTA TOLTECA.

Tolteca, *Sauss. Rev. Zool.* xx. 354.

Mexico.

ANAPLECTA NAHUA.

Nahua, *Sauss. Rev. Zool.* xx. 354.

Mexico.

ANAPLECTA OTOMIA.

Otomia, *Sauss. Mém. Soc. Phys. Gen.* xx. 238, pl. 3, f. 18.

Mexico.

Genus APHLEBIA, *C. D.* i. 136.

A. Fore wings fully developed, more than half the length of the abdomen. - marginata, infumata, cincticollis, maculata, punctata.

B. Fore wings lateral, not half the length of the abdomen. - - - brevipennis, trivittata, subaptera.

APHLEBIA MADECASSA.

Madecassa, *Sauss. Mém. Soc. Phys. Gen.* xx. pl. 3, f. 19.

Madagascar.

M. Brunner de Wattenwyl connects the Ectobidæ with the Blattidæ or Phyllodromidæ by the genera Ceratinoptera and Loboptera.

Fam. BLATTIDÆ.

A. Fore wings fully developed, horny, with no veins, or shortened, with indistinct veins, or scale-shaped.

a. Subgenital lamina of the male furnished with styles. Fore wings horny, fully developed. - CERATINOPTERA.

b. Subgenital lamina of the male with rudimentary styles or none. Fore wings abbreviated or scale-shaped.

* Fore wings scale-shaped. Hind wings none. - - LOBOPTERA.

** Fore wings abbreviated, half the length of the abdomen. Hind wings rudimentary. - TEMNOPTERYX.

† Claws with an arolium.

†† Claws with no arolium. - - - - PARATEMNOPTERYX.

B. Fore wings fully developed, coriaceous, with distinct veins. Hind wings fully developed.

a. Fore wings smooth; anal area with five or six axillary veins.

* Subgenital lamina of the male without or almost without styles. Infra-median vein of the hind wings emitting no branches towards the dividing vein.

† Antennæ setaceous. Infra-median vein of the fore wings flexuous, not angular.
‡ Head mostly covered by the prothorax. - - - BLATTA.
‡‡ Head not covered by the prothorax. - PSEUDOPHYLLODROMIA.
†† Antennæ black, hirsute.
‡ Middle vein of the fore wings flexuous, not angular. Prothorax transverse, truncated behind, not covering the scutellum. - - - APOLYTA.
‡‡ Infra-median vein of the fore wings angular near the anal vein. Prothorax oblong, rounded behind, extending over the scutellum. - PSEUDOMOPS.
** Subgenital lamina of the male with long styles. Infra-median vein of the hind wings sending many branches towards the dividing vein. - ISCHNOPTERA.
b. Fore wings sericeous; anal area with many axillary veins. - - - - NYCTIBORA.

Genus CERATINOPTERA, *C. D.* i. 136.

A. Hind wings fully developed. - - - diaphana, picta.
B. Hind wings rudimentary or none. - castanea, Peruviana.
C. Wings? - - - - - Poeyi, porcellana.

CERATINOPTERA OLMECA.

Olmeca, *Sauss. Rev. Zool.* xx. 354.

Mexico.

Genus LOBOPTERA, *C. D.* i. 155.

A. Fore wings lobiform, lateral. - decipiens, limbata, trivittata.
B. Fore wings abbreviated, touching each other in the sutural margin. - - - - - indica.

LOBOPTERA HUMBERTIANA.

Polyzosteria Humbertiana, *Sauss. Mél. Orth.* 1.

Ceylon.

Genus TEMNOPTERYX, *C. D.* i. 144.

A. Fore wings and hind wings of the male abbreviated. capensis, inconspicua, fulva, virginica, tarasca.
B. Fore wings and hind wings of the male fully developed. - - - - - deropeltiformis.

TEMNOPTERYX TRUNCATA.

Blatta truncata, *C. B.* 87.

Temnopteryx Indica.

Polyzosteria Indica, *C. B.* 152.

Temnopteryx abbreviata.

Blatta abbreviata, *C. B.* 87.

Temnopteryx Coulomana.

Blatta Coulomana, *C. B.* 87.

Temnopteryx phalerata.

Blatta phalerata, *C. B.* 87—Temnopteryx Capensis, *C. D.* i. 144. *a*, *b*. Cape. From M. Brunner de Wattenwyl's collection.

Temnopteryx brevipennis.

Ischnoptera brevipennis, *C. B.* 112.

Temnopteryx nana.

nana, *Sauss. Mém. Soc. Phys. Gen.* xx. 241.
Senegal.

Temnopteryx obscura.

obscura, *Sauss. Mém. Soc. Phys. Gen.* xx. 241.
Hindostan. Samoa.

Temnopteryx Sumichrasti.

Sumichrasti, *Sauss. Rev. Zool.* xx. 97.
Mexico.

Temnopteryx limbata.

limbata, *Sauss. Rev. Zool.* xx. 98.
Mexico.

Temnopteryx Otomica.

Otomica, *Sauss. Rev. Zool.* xx. 98.
Mexico.

Genus PARATEMNOPTERYX.

Paratemnopteryx, *Sauss. Mém. Soc. Phys. Gen.* xx. 273.

1. Paratemnopteryx Australis.

Australis, *Sauss. Mém. Soc. Phys. Gen.* xx. 273, pl. 3, f. 22.
Melbourne.

Genus BLATTA.

Phyllodromia, *Serv.* &c.

A. Infra-median vein of the hind wings entire, without branches. - - - - - - germanica.

B. Infra-median vein of the hind wings emitting a few branches towards the tip of the wing.

a. Prothorax with a browner disk.

* Disk of the prothorax with two brown stripes. - cognata, bivittata, bifasciata, totonaca, minor, Australiæ, inversa, spuria.

** Disk of the prothorax wholly brown. - Cordofana, suppellectilium, alternans, ? tenella, ? vinula, circumcincta, ? misella, borealis.

b. Prothorax with the disk of one colour or with markings. - femorata, ferruginea, vilis, sordida, hieroglyphica, ? liturifera, conspersa, fasciata, adsperricollis, ? punctulata, vitrea, Cubensis, ? pellucida, latipennis.

c. Uncertain species. - - - - ? ampla, ? proterva.

Page 88.

Blatta bivittata.

diluta, *C. B.* 89.

Page 89.

Blatta suppellectilium.

phalerata, *C. B.* 87—Cubensis, *C. B.* 90.

a. St. Domingo. From Mr. Tweedie's collection.

Page 90.

Blatta maculata.

a—e. Vienna. From M. Brunner de Wattenwyl's collection.

Blatta punctata.

a—e. Vienna. From M. Brunner de Wattenwyl's collection.

Page 92.

Blatta Capensis.

Capensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 243, pl. 3, f. 20.

Cape.

For Phyllodromia fasciata, *C. D.* i. 138, *read* Blatta fasciata.

Page 112.

Blatta Brunneriana.

Brunneriana, *Sauss. Rev. Zool.* xx. 98.

Mexico.

Blatta dilatata.

dilatata, *Sauss. Rev. Zool.* xx. 98.
Mexico.

Blatta Acolhua.

Acolhua, *Sauss. Rev. Zool.* xx. 99.
Mexico.

Blatta Orizabæ.

Orizabæ, *Sauss. Rev. Zool.* xx. 355.
Mexico.

Blatta Nahua.

Nahua, *Sauss. Rev. Zool.* xx. 355.
Mexico.

Blatta reticularis.

reticularis, *Blanch. Gay, Hist. Chile, Zool.* vi. 15.
Chili.

Blatta Ceylonica.

Ceylonica, *Sauss. Rev. Zool.* xx. 355. *Mém. Soc. Phys. Gen.* xx. 247.
Ceylon.

Blatta Luneli.

Luneli, *Sauss. Rev. Zool.* xx. 355.
Hindostan.

Blatta bitæniata.

bitæniata, *Sauss. Mém. Soc. Phys. Gen.* xx. 243.
Australia.

Blatta similis.

similis, *Sauss. Mém. Soc. Phys. Gen.* xx. 245.
Australia?

Blatta affinis.

affinis, *Sauss. Mém. Soc. Phys. Gen.* xx. 248.
Isle of Banda.

Blatta anomala.

anomala, *Sauss. Mém. Soc. Phys. Gen.* xx. 248.
Gabon.

Blatta? lituurifera.

Fulva, fere linearis, subtus testacea; caput latum, liberum, fronte valde retracta; oculi latissimi; prothorax disco nigro guttis tribus fulvis, lateribus vitreis; alæ longæ, diaphanæ, nigro venosæ; alæ anticæ dimidio apicali perobliquo fusco; alæ posticæ apud costam nigricantes.

Tawny, narrow, smooth, shining, nearly linear. Head short, broad, not covered by the prothorax; vertex narrow between the eyes, the latter very broad; front much retracted. Prothorax transverse, narrower in front; fore border and hind border slightly rounded; sides rounded, pellucid; disk black except in front, including three tawny dots; of these two are lateral and in front of the third, which is forked. Pectus and legs testaceous, the latter moderately stout. Wings long, pellucid; veins black. Fore wings with the apical half very obliquely brown, the outline of the brown part extending from near the tip of the costa to near the base of the interior border; costa slightly rounded for more than half the length from the base; scapular vein emitting to the costa parallel oblique veinlets, these towards the tip are accompanied by transverse sectors. Hind wings blackish along the costa. Length of the body 5½ lines; expansion of the fore wings 12 lines.

The specimen described is mutilated; it differs somewhat in structure from the typical species of Blatta.

a. W. Coast of N. America. Presented by Capt. Kellett and Lieut. Wood.

Blatta æqualis.

Fœm. *Picea, fusiformis, pectore ventris disco pedibusque testaceis; caput prothoracem perpaullo superans; palpi testacei; prothorax brevis, lateribus tenuiter testaceis; alæ anticæ breves, costa testacea.*

Female. Piceous, fusiform, smooth, shining. Head extending very little beyond the prothorax; vertex broad between the eyes. Palpi testaceous. Antennæ piceous, tawny at the base. Prothorax transverse, its breadth much exceeding its length; fore border slightly truncated; sides rounded, narrowly testaceous and hyaline; hind border straight. Pectus, disk of the under side of the abdomen and legs testaceous, the latter rather stout. Fore wings about half as long as the abdomen; costa testaceous and semihyaline. Length of the body 5½ lines.

The specimen described is probably not fully developed.

a. Tejuca. Presented by the Rev. H. Clark.

Blatta innotabilis.

Fœm. *Testacea, longi-elliptica; caput prothoracem perpaullo superans; prothorax brevis, piceo bilituratus, oblique bisulcatus, lateribus valde rotundatis late vitreis; alæ anticæ fusco punctatæ, striga dextra ferruginea lata diffusa; alæ posticæ diaphanæ.*

Female. Testaceous, elongate-elliptical, smooth, shining. Head extending very little beyond the prothorax; vertex broad between the eyes, which are black. Antennæ brown, testaceous towards the base, longer than the body. Prothorax transverse, nearly twice as broad as long; fore border truncated; sides much rounded, broadly pellucid; hind border straight; an oblique furrow and an irregular variable piceous mark on each side in the disk. Wings extending much beyond the abdomen. Fore wings with very numerous minute brown dots; these are least abundant in the right wing, where there is a broad diffuse ferruginous streak. Hind wings pellucid; veins pale. Length of the body 4 lines; expansion of the fore wings 8 lines.

a. Seychelles. Presented by Dr. Perceval Wright.

Blatta brevipes.

Fœm. *Testacea, fusiformis; caput prothoracem paullo superans, fascia latissima fasciaque anteriore tenui piceis; prothorax fulvus, vittis duabus undulatis nigris, margine antico lateribusque pallide testaceis; cerci picei; pedes breves, robusti; alæ luridæ, abdomen sat superantes; alæ anticæ costa vitrea, striga subcostali picea brevissima.*

Female. Testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax, with a very broad piceous band between the eyes, and with a narrow piceous band between the sockets of the antennæ; vertex broad between the eyes. Antennæ brown, minutely setose, testaceous at the base. Prothorax tawny, slightly transverse, widening hindward; fore border and sides pale testaceous, much rounded; hind border slightly rounded; an undulating black stripe on each side. Cerci piceous. Legs short, stout; femora with long slender spines. Wings lurid, extending somewhat beyond the abdomen. Fore wings with a very short piceous subcostal streak extending from the base; costa pellucid. Length of the body 8 lines; expansion of the fore wings 18 lines.

a. Bombay. Presented by Dr. Leith.

Blatta continua.

Fœm. *Pallide testacea, fusiformis; caput piceum, prothoracem paullo superans, fronte facieque testaceis, illius disco piceo; prothorax vittis duabus marginalibus pallide testaceis postice latioribus; cerci picei; alæ anticæ ferrugineæ, abdomen longe superantes, vitta costali pallide testacea strigaque posteriore nigra basalibus; alæ posticæ luridæ.*

Female. Pale testaceous, slender, fusiform, smooth, shining. Head piceous, extending a little beyond the prothorax; front and face testaceous, the former with a piceous disk. Eyes black, with a large yellow spot. Antennæ brown, testaceous at the base. Prothorax transverse, widening hindward; sides and hind border rounded; fore border slightly rounded; two pale testaceous marginal stripes very narrowly connected on the fore border, irregularly increasing in breadth towards the base of the fore wings, where they are continued along the costa for rather less than one-third of its length. Cerci piceous. Legs slender. Wings extending much beyond the abdomen. Fore wings ferruginous, excepting the stripe before

mentioned, which is accompanied on its hind side by a short black streak. Hind wings lurid. Length of the body 11 lines; expansion of the fore wings 25 lines.

a. Bombay. Presented by Dr. Leith.

Blatta lycoides.

Fœm. *Picea, fusiformis; caput prothoracem perpaullo superans; prothorax antice tenuissime lateraliter sat late testaceo marginatus; cerci testacei, articulis subtus fusco maculatis; pedes fulvi aut testacei; alæ piceæ, abdomen sat superantes; alæ anticæ vitta costali testacea lanceolata.*

Female. Piceous, fusiform, smooth, shining. Head extending very little beyond the prothorax; mouth and sockets of the antennæ testaceous. Prothorax transverse, narrower in front; a testaceous line along the fore border and a testaceous stripe along each side; fore border truncated; sides rounded; hind border very slightly rounded. Cerci testaceous, long, with a brown spot on each joint beneath. Legs stout, tawny or testaceous; femora with slender spines. Wings piceous, extending somewhat beyond the abdomen. Fore wings with a slender testaceous costal stripe, which is broadest at the base and does not extend to the tip. Length of the body 4½ lines; expansion of the fore wings 10 lines.

It has some resemblance to B. partita, but the lateral stripes of the prothorax are narrower and more regular.

a. Bombay. Presented by Dr. Leith.

Blatta telephoroides.

Fœm. *Pallide testacea, fusiformis; prothorax transversus, disco piceo, nonnunquam fulvo univittatus; pectoris ventrisque latera picea; pedes sat robusti; alæ anticæ subdiaphanæ, abdomen sat superantes, vitta discali fuscescente diffusa informi; alæ posticæ diaphanæ.*

Female. Pale testaceous, fusiform, smooth, shining. Head extending very little beyond the prothorax. Eyes black, moderately remote. Prothorax transverse; fore border truncated; sides rounded; hind border nearly straight; disk piceous, sometimes with a tawny stripe which widens in front. Sides of the pectus and of the under side of the abdomen mostly piceous. Cerci long. Legs rather stout; spines of the femora rather slender. Wings extending somewhat beyond the abdomen. Fore wings nearly hyaline; a diffuse irregular variable discoidal brownish stripe which is most determinate near the base. Hind wings pellucid. Length of the body 5 lines; expansion of the fore wings 12 lines.

The narrower prothorax distinguishes it from B. biligata.

a. Bombay. Presented by Dr. Leith.

Blatta subreticulata.

Mas. *Pallide testacea, fusiformis; caput prothoracem paullo superans, piceo unifasciatum et univittatum; palpi nigricantes, articulo 1o pallido testaceo; prothorax nigro late bivittatus, lateribus vitreis;*

cerci picei, articulis apice pallide testaceis; alæ pallide cinereæ, abdomen longe superantes, venulis transversis fuscis; alæ anticæ apud costam vitreæ.

Male. Pale testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; a piceous band between the eyes emitting a piceous stripe towards the mouth; vertex broad between the eyes, which are black. Second and third joints of the palpi blackish. Antennæ piceous, longer than the body, testaceous at the base. Prothorax transverse, widening hindward; fore border truncated; sides and hind border rounded, the former pellucid; two broad black stripes which slightly diverge hindward and are straight on the inner side but rounded on the outer side. Cerci piceous; tips of the joints pale testaceous. Legs moderately short and stout; femora with long slender spines. Wings pale cinereous, extending much beyond the abdomen; transverse sectors mostly brown. Fore wings pellucid along the costa. Length of the body 5 lines; expansion of the fore wings 12 lines.

The stripes on the prothorax are broader than those of B. Germanica. It is much more slender than B. bivittata. The markings on the head distinguish it from B. contigua.

a. Bombay. Presented by Dr. Leith.

Blatta figurata.

Mas. *Pallide testacea, fusiformis; vertex litura picea guttam testaceam includente; prothorax piceus, brevi-conicus, lateribus diaphanis postice piceis; pedes robusti; alæ diaphanæ, abdomen longe superantes; alæ anticæ plagis quatuor piceis magnis subquadratis.*

Male. Pale testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; vertex with a piceous mark, which includes a testaceous dot. Eyes black, remote. Prothorax piceous, short-conical; fore border truncated; sides rounded, pellucid, except towards the hind border, which is nearly straight. Cerci long. Legs stout; femora with slender spines. Wings pellucid, extending much beyond the abdomen; veins pale. Fore wings with two large subquadrate piceous patches on each; first patch at the base; second at a little beyond the middle; a slight brownish tinge in the exterior part of the disk. Length of the body 6 lines; expansion of the fore wings 12 lines.

a. Bombay. Presented by Dr. Leith.

Blatta annulifera.

Fœm. *Pallide testacea, fusiformis; caput vertice vittaque frontali lanceolata piceis; prothorax transversus, antice angustior, annulo magno nigro; cerci picei, articulis apice fulvis; pedes sat robusti; alæ anticæ fulvæ, abdomen paullo superantes, costa pallide testacea; alæ posticæ diaphanæ.*

Female. Pale testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; vertex piceous, a broad piceous stripe on the front and face, decreasing in breadth from the vertex. Prothorax transverse, narrower in front, with a black ringlet which is broadest on each

side and extends to the hind border and nearly to the fore border, which is truncated; sides rounded; hind border nearly straight. Cerci long, piceous; tips of the spines of the femora slender. Wings extending a little beyond the abdomen. Fore wings tawny, pale testaceous along the costa. Hind wings pellucid. Length of the body 5 lines; expansion of the fore wings 10 lines.

a. Bombay. Presented by Dr. Leith.

Blatta transversalis.

Mas et fœm. *Testacea, longi-ovata; caput piceum, litura frontali furcata margineque antico testaceis; prothorax piceus, brevi-conicus, lateribus diaphanis; pectoris et ventris latera piceo plagiata; abdomen fusco fasciatum; pedes robusti; alæ anticæ piceæ, testaceo biplagiatæ, abdomen non superantes; alæ posticæ diaphanæ.*

Male and female. Testaceous, elongate-oval, smooth, shining. Head piceous, mostly covered by the prothorax; sockets of the antennæ, a forked mark on the front and mouth testaceous; vertex broad between the eyes, which are black. Palpi and antennæ testaceous. Prothorax short-conical, piceous, excepting the sides, the outline of this hue narrowed near the hind border; fore border slightly truncated; sides pellucid, rounded; hind border nearly straight. Abdomen with brown bands; under side and pectus with brown patches on each side. Cerci long. Legs stout; femora with very slender spines. Fore wings piceous, not extending beyond the abdomen, with a large testaceous patch at the base and another at one-third of the length, the two connected by a hyaline testaceous costal streak; right fore wing pellucid along the interior border. Hind wings pellucid; veins testaceous. Length of the body 5—6 lines; expansion of the fore wings 9 lines.

a. Bombay. Presented by Dr. Leith.

Blatta fasciceps.

Fœm. *Testacea, fusiformis; caput piceo unifasciatum, prothoracem vix superans; prothoracis discus fulvus; cerci longi, articulis subtus fusco guttatis; pedes robusti, breviusculi; alæ anticæ semidiaphanæ, abdomen longe superantes; alæ posticæ diaphanæ, venulis transversis fuscis.*

Female. Testaceous, fusiform, smooth, shining. Head hardly extending beyond the prothorax, with a piceous band between the eyes and the sockets of the antennæ. Eyes piceous, remote. Prothorax transverse, narrower in front; fore border truncated; sides much rounded; hind border slightly rounded; disk irregularly tawny. Cerci long; a brown dot on each joint beneath. Legs stout, rather short; spines of the femora moderately stout. Wings extending much beyond the abdomen. Fore wings semihyaline. Hind wings pellucid; transverse veins brown. Length of the body $5\frac{1}{2}$ lines; expansion of the fore wings 14 lines.

Much allied to B. biligata; the latter has a broader prothorax.

a. Bombay. Presented by Dr. Leith.

Blatta subfasciata.

Fœm. *Picea, fusiformis, subtus pallide testacea; caput prothoracem non superans; palpi basi testacei; prothorax brevis, lateribus late vitreis; abdomen testaccum, lateribus fuscis; alæ anticæ striga costali basali plagaque transversa vitreis connexis; alæ posticæ diaphanæ.*

Female. Piceous, fusiform, smooth, shining, pale testaceous beneath. Head not extending beyond the prothorax; vertex broad between the eyes, which are black. Palpi piceous; first joint testaceous. Antennæ piceous, longer than the body, testaceous at the base. Prothorax broadly transverse; fore border truncated; sides rounded, broadly pellucid; hind border straight. Abdomen brown above and beneath along each side. Legs moderately stout. Wings extending much beyond the abdomen. Fore wings with a pellucid costal streak which extends from the base to a pellucid patch at one-third of the length. Hind wings pellucid; veins white. Length of the body 4 lines; expansion of the fore wings 8 lines.

a. Bombay. Presented by Dr. Leith.

Blatta inexacta.

Fœm. *Nigra, fusiformis, subtus pallide testacea; caput prothoracem perpaullo superans; prothorax lateribus rotundatis margineque antico flavescente albis; ventris discus fulvus, nigricante bivittatus; cerci testacei, fusco fasciuti; alæ anticæ fuscæ, apud costam diaphanæ, apices versus cinereæ, abdomen sat superantes.*

Female. Black, fusiform, smooth, shining, pale testaceous beneath. Head extending very little beyond the prothorax; vertex broad; mouth and palpi pale testaceous. Antennæ brown, testaceous at the base, a little longer than the body. Prothorax transverse, a little narrower in front; fore border and hind border nearly straight; sides rounded; a concise yellowish white border in front and on each side, narrowest in front. Disk of the abdomen beneath tawny, with a blackish stripe on each side. Cerci testaceous, with brown bands. Wings extending somewhat beyond the abdomen. Fore wings brown, cinereous towards the tips, pellucid and with pale veins along the costa. Length of the body 4 lines; expansion of the fore wings 8 lines.

It has most resemblance to B. parilis, but the fore wings are longer, paler towards the tips, and the costa is not rounded.

a. Bombay. Presented by Dr. Leith.

Blatta subrotundata.

Fœm. *Fusca, fusiformis, subtus testacea; caput prothoracem perpaullo superans; antennæ testaceæ; prothoracis latera rotundata, late diaphana; venter fuscus, apice cercisque testaceis; alæ anticæ fuscæ, abdomen sat superantes, costa rotundata, striga basali costali lata diaphana.*

Female. Brown, fusiform, testaceous beneath. Head extending very little beyond the prothorax; vertex moderately broad; mouth, palpi and antennæ testaceous. Prothorax transverse, narrower in front; fore border and hind border nearly straight; sides rounded, broadly pellucid. Abdomen beneath brown; apical part and cerci testaceous. Wings extending somewhat beyond the abdomen. Fore wings brown; costa rounded; a pellucid basal costal streak. Length of the body 3½ lines; expansion of the fore wings 7 lines.

It has much resemblance to B. isomorpha, but the fore wings of the latter are a little shorter and the costa is a little more rounded, and the pale costal hue extends along the whole length.

a. Bombay. Presented by Dr. Leith.

Blatta ramifera.

Fœm. *Testacea, fusiformis; caput nigro bifasciatum, prothoracem per-paullo superans; prothorax brevi-conicus, vittis duabus nigris subarcuatis ramulum emittentibus; venter vittis duabus incisis plagaque nigris; femora apice nigra; tarsi nigricantes; alæ anticæ abdomen paullo superantes, apud costam late vitreæ; alæ posticæ fuscescentes.*

Female. Testaceous, fusiform, smooth, shining. Head extending very little beyond the prothorax; a black band between the eyes and a broader black band on the front; vertex broad between the eyes. Prothorax short-conical; fore border slightly truncated; sides slightly rounded, broadly pellucid; hind border straight; two slightly curved black stripes, not extending to the hind border, each of them emitting a little branch from its inner side. Abdomen beneath with a black notched stripe on each side and a black patch in the disk. Legs moderately stout; femora with black tips; tarsi blackish. Wings extending a little beyond the abdomen. Fore wings broadly pellucid along the costa, which is slightly rounded. Hind wings brownish. Length of the body 6½ lines; expansion of the fore wings 13 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Blatta submarginata.

Mas. *Nigra, longi-elliptica; caput prothoracem vix superans; prothorax brevis, latus, antice tenuissime lateraliter sat late testacco marginatus; pectus testaceum; abdomen piceum, segmentis testaceo marginatis; pedes testacei, femoribus piceo vittatis.*

Fœm? *Lutea, longi-ovata, vittis duabus fronte ventreque nigris.*

Male. Black, elongate-elliptical, smooth, shining. Head hardly extending beyond the prothorax; vertex broad between the eyes, which are piceous. Palpi mostly piceous. Antennæ piceous, tawny at the base. Prothorax broadly transverse; fore border very narrowly testaceous, slightly truncated; sides rounded, rather broadly testaceous and semihyaline; hind border nearly straight. Pectus testaceous. Abdomen piceous; hind border of the segments testaceous. Legs testaceous, short; femora striped with piceous. Wings hardly extending to the tip of the abdomen. Fore wings with a lanceolate, testaceous, semihyaline, costal

stripe. Hind wings cinereous. Length of the body 3½ lines; expansion of the fore wings 5½ lines.

Near allied to B. parilis; the latter has longer fore wings and the pale fore border of the prothorax is broader.

Female? Luteous, elongate-oval, wingless. Front black. Prothorax and abdomen with two black stripes. Prothorax conical. Abdomen black beneath. Legs stout. The elongation of the hind borders of the thoracic segments indicates the future development of wings.

a, *b*. Cahar. Presented by J. C. Bowring, Esq.

Blatta depressa.

Fœm. *Lutea, fusiformis, subtus nigra; caput prothoracem perpaullo superans; abdomen nigrum, segmentis luteo marginatis; pedes lutei, coxis nigro strigatis, femoribus apice nigris; ala antica dextra apud marginem interiorem alæque posticæ nigræ.*

Female. Luteous, fusiform, black beneath. Head extending very little beyond the prothorax; disk of the front and of the face black. Prothorax transverse, its breadth much exceeding its length; fore border slightly truncated; sides much rounded; hind border nearly straight. Abdomen black; hind borders of the segments luteous. Legs stout; coxæ streaked with black; femora with black tips. Wings extending somewhat beyond the abdomen. Fore wings coriaceous; transverse sectors very numerous; right wing black along the interior border. Hind wings black. Length of the body 5 lines; expansion of the fore wings 11 lines.

The specimen described is mutilated. The prothorax is much narrower than that of B. marginifera.

a. Australia. Presented by the Entomological Club.

Blatta lepida.

Fœm. *Nigra, longi-ovata, subtus testacea; caput prothoracem vix superans, flavo bifasciatus biplagiatus et antice lituratus; palpi testacei; prothorax antice et postice tenuiter et lateraliter late flavo marginatus; mesothorax, metathorax et abdominis segmenta dorsalia picea postice tenuiter et lateraliter late flavo marginata; segmenta ventralia nigro punctata; cerci nigri, lati, articulis subtus testaceo marginatis.*

Female. Black, elongate-oval, testaceous beneath. Head hardly extending beyond the prothorax; vertex broad between the eyes; two yellow bands between the eyes and the sockets of the antennæ, two large yellow patches on the front and some smaller yellow marks on the face. Palpi testaceous. Antennæ piceous. Prothorax transverse, slightly narrower in front, with a yellow border which is narrow in front and behind and broad on each side; fore border slightly truncated; sides slightly rounded; hind border hardly rounded. Mesothorax, metathorax and dorsal segments of the abdomen piceous, broadly bordered on each side and narrowly bordered behind with testaceous. Ventral segments with

numerous black points. Cerci broad, black; hind borders of the joints testaceous beneath. Legs short, stout. Length of the body 5 lines.

a. Australia. Presented by the Haslar Hospital.

Blatta placens.

Fœm. *Nigra, convexa, fere elliptica; caput inter oculos luteo fasciatum; protharax fere semicircularis, antice et postice tenuiter lateraliter latissime luteo marginatus; mesothorax et metathorax postice tenuiter lateraliter latissime luteo marginati, angulis posticis productis; abdominis segmenta dorsalia lateraliter luteo marginata, transverse lutescente lineata et testaceo punctata; segmenta ventralia albido marginata; cerci lutei; coxæ pallide flavæ.*

Female. Black, convex, smooth, shining, nearly elliptical. Head extending very little beyond the prothorax; vertex broad and with a luteous band between the eyes. Prothorax transverse, nearly semicircular, rather narrowly bordered in front and behind and very broadly bordered on each side with luteous. Mesothorax and metathorax narrowly bordered behind and very broadly bordered on each side with luteous; hind angles elongated. Dorsal segments of the abdomen bordered with luteous on each side; a transverse dark luteous line in each disk and a row of pale testaceous points along each hind border. Ventral segments with whitish hind borders. Cerci luteous, long. Legs short, stout; coxæ and trochanters pale yellow. Length of the body $4\frac{1}{2}$ lines.

The specimen described does not seem to be fully developed.

a. Australia. From Mr. Argent's collection.

Blatta ramosa.

Fœm. *Fulva, fusiformis; caput nigrum, prothoracem vix superans; prothorax niger, transverse ellipticus, fulvo tenuiter marginatus; abdomen piceum, apice fulvum; femora subtus setosa; alæ anticæ coriaceæ, postice piceo late vittatæ; alæ posticæ diaphanæ.*

Female. Tawny, fusiform. Head black, hardly extending beyond the prothorax; vertex rather narrow between the eyes, which are tawny and large. Palpi tawny. Prothorax black, transversely elliptical, with a narrow tawny border. Abdomen piceous, tawny at the tip. Legs rather slender; femora with bristles beneath. Wings extending somewhat beyond the abdomen. Fore wings coriaceous, with a broad piceous stripe along the interior border. Hind wings pellucid; veins pale. Length of the body 4 lines; expansion of the fore wings 9 lines.

a. Australia. Presented by the Haslar Hospital.

Blatta concisa.

Fœm. *Nigra, fusiformis; caput prothoracem perpaullo superans, facie clypeoque testaceo marginatis; antennæ fulvæ, apices versus fuscæ, corpore paullo breviores; prothorax lateribus subrotundatis margineque antico anguste flavescente albis; ventris latera pallide testacea, nigro interlineata; alæ anticæ abdomen sat superantes, vitta costali lanceolata flavescente alba; alæ posticæ fuscæ.*

Female. Black, fusiform, smooth, shining. Head extending very little beyond the prothorax; vertex broad; fore border of the face and of the clypeus testaceous. Palpi testaceous. Antennæ tawny, brown for nearly half the length from the tips, a little shorter than the body. Prothorax transverse, a little narrower in front; fore border and hind border nearly straight; sides slightly rounded; these and the fore border are narrowly and concisely yellowish white, which hue widens towards the hind border. Sides of the abdomen beneath pale testaceous, this hue interlined with black. Cerci and legs pale testaceous, the latter short and slender. Wings extending somewhat beyond the abdomen. Fore wings with a lanceolate narrow concise costal yellowish white stripe, which extends from the base to the tip. Hind wings brown. Length of the body 4 lines; expansion of the fore wings 8 lines.

The concise costal stripe distinguishes it from B. inexacta and B. subrotundata.

a. Australia. Presented by the Entomological Club.

Blatta? gloriosa.

gloriosa, *Stal, Ofv. K. Vet. Ak. Forh.* 1855, 351.

Genus PSEUDOPHYLLODROMIA, *C. D.* i. 144.

Pseudophyllodromia venosa.

Blatta venosa, *C. B.* 89.

Pseudophyllodromia Heydeniana.

Ellipsidium Heydenianum, *C. B.* 85.

Pseudophyllodromia Peruana.

Blatta Peruana, *C. B.* 93.

Pseudophyllodromia fasciatella.

fasciatella, *Sauss. Rev. Zool.* xx. 390.

Surinam.

Genus APOLYTA, *C. D.* i. 135.

A. Prothorax of one colour. - - - - vestita.
B. Prothorax with a black disk. - - - pellucida.

Genus PSEUDOMOPS.

A. Fore wings subcorneous; veins hardly seen. (Pachnepterix), pruinosa, histrio.

B. Fore wings coriaceous; veins very distinct.
a. Cerci lanceolate.

Asiatic species.

signata, vittata, nigra, soror, spectabilis.

American species.

oblongata, cincta, discicollis, laticornis, ? dubia, ? stimulans, affinis, flavipes, annulicornis, ? tristicula, Tolteca, Gueriniana, lineata.

b. Cerci spatulate. - - - - - crinicornis.

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PSEUDOMOPS OBLONGATA.

a, *b*. Mexico. From M. Brunner de Wattenwyl's collection.

Appears to be identical with one specimen recorded in this list as P. Mexicana.

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PSEUDOMOPS CINCTA.

It is also supposed to be a variety of P. Mexicana.

a, *b*. Mexico. From M. Brunner de Wattenwyl's collection.

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ISCHNOPTERA OCCIDENTALIS.

a, *b*. Mexico. From M. Brunner de Wattenwyl's collection.

ISCHNOPTERA AUSTRALICA, *C. D.* i. 145.

a, *b*. Cape York. From M. Brunner de Wattenwyl's colldction.

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ISCHNOPTERA BLATTOIDES.

Epilampra blattoides, *C. B.* 68—Blatta capitata, *C. B.* 93.

ISCHNOPTERA NAHUA.

Nahua, *Sauss. Rev. Zool.* XX. 356.

Mexico.

ISCHNOPTERA TOLTECA.

Tolteca, *Sauss. Rev. Zool.* XX. 356.

Mexico.

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ISCHNOPTERA UNDULIFERA.

Mas. *Testacea, fusiformis, nitens; caput nigrum, prothoracem paullo superans, vertice testaceo oblique bistrigato; prothorax plaga discali maxima nigra lateraliter undulata, lateribus valde rotundatis; venter nigricante bivittatus; cerci fulvi; alæ anticæ abdomen vix superantes, striga basali subcostali nigricante furcata.*

Male. Testaceous, fusiform, shining. Head black, extending a little beyond the prothorax; mouth and an oblique streak on each side of the vertex testaceous. Eyes tawny. Antennæ black. Prothorax transverse; fore border and hind border slightly truncated; sides much rounded; disk black, the outline of this hue with two deep rounded notches on each side. Abdomen beneath with a broad blackish band on each side. Cerci tawny. Legs short, stout; femora with a few very minute spines beneath.

Wings hardly extending beyond the abdomen. Fore wings with a blackish forked subcostal streak extending from the base. Length of the body 8 lines; expansion of the fore wings 15 lines.

a. Chontales, Nicaragua. From Mr. Janson's collection.

Ischnoptera Capensis.

Capensis, *Sauss. Mém. Soc. Phys. Gen.* xx. 253.

Cape.

Ischnoptera ramosa.

ramosa, *Sauss. Mém. Soc. Phys. Gen.* xx. 254.

Hindostan.

Ischnoptera terranea.

Mas et fœm. *Picea, subfusiformis; caput prothoracem non superans; palpi testacei; antennæ nigræ, basi fulvæ; prothorax transversus, fere semicircularis, subtilissime punctatus, disco nigricante; pectus et abdomen nigra; pedes breves, saturate rufi; alæ abdomen longe superantes.*

Male and female. Piceous. Head tawny about the month, not extending beyond the prothorax. Eyes black. Palpi testaceous. Antennæ black, tawny at the base. Prothorax transverse, nearly semicircular, very minutely punctured, blackish except along the fore border and along each side. Pectus and abdomen black. Legs dark red, short, stout; femora with very few bristles; tibiæ with rather long spines. Wings extending much beyond the abdomen. Fore wings coriaceous; transverse sectors very numerous. Length of the body 6—6½ lines; expansion of the fore wings 14—14½ lines.

a. Bombay. Presented by Dr. Leith.

Ischnoptera subcolorata.

Mas. *Testacea, fusiformis, glabra, nitens; caput prothoracem vix superans; prothorax transversus, margine postico subrotundato; alæ posticæ cinereæ.*

Male. Testaceous, fusiform, smooth, shining. Head hardly extending beyond the prothorax. Eyes black. Antennæ a little shorter than the body. Prothorax transverse, its length more than half its breadth; fore border nearly straight; sides rounded; hind border slightly rounded. Length of the body 4½ lines; expansion of the fore wings 11 lines.

a. Bombay. Presented by Dr. Leith.

Ischnoptera triramosa.

triramosa, *Sauss. Mém. Soc. Phys. Gen.* xx. 252.

Australia.

Nyctibora crassicornis.

Paratropes vestitus, *C. B.* 151.

NYCTIBORA TERRESTRIS.

sericea? (*Burm.*) *C. B.* 151.

NYCTIBORA OBSCURA.

holosericea? (*Burm.*) *C. B.* 147.

Genus PARACERATINOPTERA.

Paraceratinoptera, *Sauss. Rev. Zool.* xx. 357.

1. PARACERATINOPTERA NAHUA.

Nahua, *Sauss. Rev. Zool.* xx. 357.

Mexico.

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Genus PARALATINDIA.

Paralatindia, *Sauss. Rev. Zool.* xx. 101.

1. PARALATINDIA AZTECA.

Azteca, *Sauss. Rev. Zool.* xx. 101.

Mexico.

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A. Cerci as long as the supra-anal lamina. Fore wings lobiform or none. Hind wings none. -	POLYZOSTERIA.
B. Cerci extending much beyond the supra-anal lamina.	
a. Supra-anal lamina in both sexes emarginate or quadrate, acutely angular or lobate. Femora very spinose. - - - -	PERIPLANETA.
b. Supra-anal lamina of the male quadrate, with obtuse angles of the female triangular and entire. Femora slightly spinose. - -	DEROPELTIS.

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POLYZOSTERIA SUBAPTERA.

a—e. Dalmatia. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA DECIPIENS.

a—e. Dalmatia. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA MELANARIA, *C. D.* 154.

a, b. Port Denison. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA PUNCTATA.

a. Queensland. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA NITIDA, *C. D.* i. 155.

a, *b*. Ternate. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA LIGATA.

a, *b*. Cape York. From M. Brunner de Wattenwyl's collection.

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POLYZOSTERIA MACULATA.

a, *b*. Swan River. From M. Brunner de Wattenwyl's collection.

POLYZOSTERIA NOBILIS, *C. D.* i. 154.

a. Swan River. From M. Brunner de Wattenwyl's collection.

PERISPHÆRIA CINGULATA.

cingulata, *C. B.* 168—Aptera lenticularis, *C. B.* 54.

PERISPHÆRIA MADECASSA.

Madecassa, *Sauss. Mém. Soc. Phys. Gen.* XX. 277.
Madagascar.

POLYZOSTERIA HEYDENIANA.

Periplaneta Heydeniana, *C. D.* i. 136.

POLYZOSTERIA BILOBA.

biloba, *Sauss. Mém. Soc. Phys. Gen.* XX. 258, pl. 3, f. 20.
Amboina.

POLYZOSTERIA CUPREA.

maculata, *C. D.* i. 154.

POLYZOSTERIA PULCHELLA.

limbata, *C. B.* 154.

POLYZOSTERIA ATERRIMA.

aterrima, *C. D.* i. 154—consobrina, *C. B.* 153.

POLYZOSTERIA BICOLOR.

ligata, *C. D.* i. 155.

Polyzosteria biglumis.

subaptera, *C. D.* i. 154.

Polyzosteria melanaria.

melanaria, *C. D.* i. 154—analis, *C. B.* 153.

Polyzosteria coxalis.

Mas. *Picea, longi-ovata; caput prothoracem vix superans; prothorax fere semicircularis; cerci apice rufi; pedes breves, robusti, coxis nigris flavo marginatis, coxis posticis intus trochanteribus femoribusque rufis, tibiis tarsisque nigris, tarsorum articulo 4o rufo.*

Male. Piceous, elongate-oval, smooth, shining. Head hardly extending beyond the prothorax. Prothorax nearly semicircular. Cerci short; tips red. Legs short, stout; coxæ black, bordered with yellow on the outer side; hind coxæ red along the inner side; trochanters and femora red, the latter with short stout black spines; tibiæ and tarsi black, fourth joint of the latter red. Length of the body 9½ lines.

The specimen described has the rudiments of fore wings.

a. Bombay. Presented by Dr. Leith.

Polyzosteria subornata.

Fœm. *Nigra, ovata; caput prothoracem vix superans; palpi fulvi; prothorax luteo bifasciatus; mesothorax et metathorax angulis posticis subproductis luteo uniplagiatis; segmentorum abdominalium latera luteo maculata; pedes fulvi.*

Female. Black, oval, smooth, shining. Head hardly extending beyond the prothorax; front broad between the eyes, which are very flat; mouth and palpi tawny. Prothorax broadly transverse, narrower in front, with a transverse impression in the disk, with two luteous bands, one near the fore border, the other near the hind border; fore border truncated; sides rounded; hind border slightly rounded. Mesothorax and metathorax with a large luteous patch near each hind angle, which is slightly elongated. Abdomen with a transverse luteous spot on each side of each segment. Legs tawny, thick; spines stout. Length of the body 9 lines.

The specimen described appears not to be fully developed.

a. St. Helena. Presented by J. C. Mellis, Esq.

Polyzosteria heterospila.

Fœm. *Nigra, longi-ovata, opaca; caput prothoracem non superans, fasciis duabus lateribusque anticis luteis; palpi fulvi, articulo 3o piceo; prothorax fere semicircularis, lineis duabus submarginalibus undulatis maculisque sex angulatis luteis; abdominis latera basi luteo maculata; pedes breves, robusti, femoribus tibiisque anticis luteis piceo vittatis.*

Female. Black, elongate-oval, mostly dull. Head not extending beyond the prothorax; hind part, two bands on the front, mouth and sides of the face luteous. Palpi tawny; third joint piceous. Prothorax nearly semicircular, its length a little more than the half of its breadth; fore border and sides rounded; hind border straight; two undulating submarginal luteous lines contracted near the fore border and retracted towards the disk; six angular irregular luteous spots in the disk, the hinder pair much larger than the others. Hinder part of the thorax and sides of the base of the abdomen with luteous spots. Legs short, stout; fore femora and fore tibiæ luteous, striped with piceous. Wings rudimentary. Length of the body 11 lines.

a. Bombay. Presented by Dr. Leith.

Polyzosteria sexpustulata.

Fœm. *Nigra, elliptica, aptera, subtus picea; prothorax brevis; mesothorax luteo bimaculatus; abdomen maculis duabus basalibus duabusque subapicalibus luteis.*

Female. Black, elliptical, smooth, shining, wingless, with six large bright luteous spots; under side piceous. Prothorax transverse, its breadth less than twice its length; fore border and hind border slightly rounded; sides much rounded; first pair of spots on the mesothorax; second on the base of the abdomen; third near the tip of the abdomen. Legs piceous, short, stout. Length of the body $7\frac{1}{2}$ lines.

a. Bombay. Presented by Dr. Leith.

Polyzosteria circumcincta.

Fœm. *Nigra, brevi-ovata, convexa, subtus fulva; caput fulvum; palpi picei; prothorax fere semicircularis, antice et postice tenuissime lateraliter late testaceo marginatus; mesothorax, metathorax et abdominis segmenta dorsalia postice tenuiter et lateraliter late testaceo marginata; cerci brevissimi.*

Female. Black, short-oval, convex, smooth, shining. Head tawny, not extending beyond the prothorax; vertex broad between the eyes, which are black. Palpi piceous. Prothorax nearly semicircular, with a testaceous border which is narrow in front, extremely narrow behind and broad on each side. Mesothorax, metathorax and dorsal abdominal segments broadly bordered on each side and narrowly bordered behind with testaceous; dorsal segments finely punctured. Pectus, ventral segments and legs tawny, the latter short and thick. Cerci very short. Length of the body 5 lines.

a. Australia.

Periplaneta rhombifolia.

histrio, *C. B.* 130.

Brazil. Mauritius. Hindostan. Siam. Cochin China.

PERIPLANETA MARGINALIS.

ligata, *C. D.* i. 150.

PERIPLANETA SOROR.

flavicincta, *C. B.* 131.

PERIPLANETA ORIENTALIS.

Blatta badia, *C. B.* 87.

PERIPLANETA AFFINIS.

affinis, *Sauss. Mém. Soc. Phys. Gen.* xx. 261.

Hindostan.

PERIPLANETA EMITTENS.

Mas. *Nigra; antennæ ferrugineæ; prothorax annulo strigisque duabus longitudinalibus luteis; pectus luteum; venter fulvus; pedes fulvi, tibiis tarsisque piceis; alæ anticæ piceæ, postice ferrugineæ, abdomen longe superantes, striga subcostali lutea lanceolata subcostali.*

Male. Black, shining. Head about the mouth and pectus luteous. Antennæ ferruginous. Prothorax widening and nearly straight on each side from the fore border to near the hind border, where the sides are rounded; hind border slightly rounded; a luteous ringlet including the disk, near and parallel to the borders, broadest along the hind border, where it emits a lanceolate branch towards a similar branch on its fore side, the rudiments of a stripe. Abdomen beneath; coxæ and femora tawny; tibiæ and tarsi piceous. Fore wings piceous, extending much beyond the abdomen, broadly ferruginous along the inner border, with a subcostal luteous lanceolate streak extending along one-fifth of the length from the base. Length of the body 11—11½ lines; expansion of the fore wings 27—28 lines.

More slender than P. inclusa, to which it has some resemblance.

a. St. Helena. Presented by J. C. Mellis, Esq.

PERIPLANETA MONOCHROMA.

Mas. *Testacea, fusiformis; caput piceo uninotatum; prothorax litura discali scutiformi; pedes graciles, setulosi; alæ abdomen longe superantes; alæ posticæ diaphanæ.*

Male. Testaceous, slender, fusiform, smooth, shining. Head with a piceous mark between the sockets of the antennæ. Eyes black, remote. Antennæ slender, longer than the body. Prothorax a little broader than long; fore border much rounded; sides slightly rounded; hind border straight; fore part of the scutcheon on the disk rounded, much broader than the hind part, which has two straight sides converging towards the straight hind border. Legs slender, beset with short stiff hairs. Wings

extending much beyond the body. Hind wings pellucid; veins pale. Length of the body 12 lines; expansion of the fore wings 27 lines.

It agrees in colour with P. apicalis, but has much longer wings.

a. Bombay. Presented by Dr. Leith.

Periplaneta ruficornis.

Mas. *Nigra, aptera, fusiformis, depressa; caput prothoracem paullo superans, antice testaceo bifasciatum; palpi apice testacei; antennæ rufæ, basi nigræ; thoracis latera rufa; prothorax brevi-conicus, lateribus rotundatis; venter rufescente uniplagiatus; cerci apice rufi; femora quatuor posteriora testaceo marginata; tibiæ apices versus rufæ; tarsi lutei.*

Male. Black, wingless, fusiform, flat, smooth, shining. Head extending a little beyond the prothorax, with two narrow testaceous bands near the mouth. Eyes piceous. Palpi with testaceous tips. Antennæ red, black towards the base. Prothorax transverse, short-conical; fore border slightly truncated; sides rounded; hind border nearly straight; two red marginal stripes extending to the hind border of the metathorax. Abdomen beneath with a reddish patch in the disk Cerci and styles with red tips. Legs short, stout; four posterior femora with a luteous hind edge; middle tibiæ red towards the tips; hind tibiæ red, black at the base; tarsi luteous. Length of the body 11½ lines.

a. Bombay. Presented by Dr. Leith.

Periplaneta curta.

Mas. *Nigra, nitens, subelliptica; caput prothoracem perpaullo superans, plagis duabus frontalibus testaceis magnis arcuatis; prothorax vittis duabus marginalibus testaceis intus undulatis; ventris discus ferrugineus; pedes testacei; alæ anticæ ferrugineæ, striga costali lanceolata testacea strigaque subcostali furcata nigra.*

Male. Black, smooth, shining, nearly elliptical. Head extending very little beyond the prothorax; mouth and a large excavated patch on each side of the front testaceous. Palpi and antennæ piceous, the latter longer than the body. Prothorax transverse, narrower in front, with two testaceous marginal stripes which are connected by a line along the fore border and are undulating on the inner side; fore border slightly truncated; sides rounded; hind border hardly rounded. Abdomen ferruginous in the disk beneath. Legs testaceous, short, stout; femora with short spines beneath. Fore wings ferruginous, with a lanceolate testaceous costal streak and with a black forked subcostal streak, both streaks extending from the base. Length of the body 7½ lines; expansion of the fore wings 13 lines.

a. Bombay. Presented by Dr. Leith.

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Fam. PERISPHÆRIDÆ.

A. Prothorax smooth. Fore wings coriaceous when developed.
a. Male winged. Fore wings flat. Female apterous.
* Prothorax not dentate nor incrassated on the sides; hind angles obtuse or straight. - PERISPHÆRIA.
** Prothorax of the male with an acute tooth on each side of the female incrassated on each side; hind angles elongated. - - DEROCALYMNA.
b. Both sexes winged. Fore wings narrowed; costa folded comb-like. - - - PROSCRATEA.
* Prothorax gibbous. Fore wings horny. -
† Both sexes winged. - - - - HORMETICA.
HOMALODEMAS.
†† Male winged? Female apterous. - - GROMPHADORHINA.

Parasphæria and Deropeltis are included with Perisphæria in this Synopsis.

Genus PARASPHÆRIA, *C. D.* i. 156.

PARASPHÆRIA OVATA.

Brachycolla Chilensis, *C. B.* 55.

DEROPELTIS ERYTHROCEPHALA.

Ischnoptera erythrocephala, *C. B.* 116—Euryzosteria Delalandi, *C. B.* 147.

DEROPELTIS JUNCEA.

Ischnoptera juncea, *C. B.* 116—Deropeltis atra, *C. D.* 146.

DEROPELTIS SIMILIS.

Ischnoptera similis, *C. B.* 116.—bivittata? *C. D.* i. 146.

DEROPELTIS MERIDIONALIS.

Polyzosteria meridionalis, *C. B.* 153—Ischnoptera bivittata, *C. D.* i. 146.

DEROPELTIS CAPENSIS.

Polyzosteria Capensis, *C. B.* 153—Ischnoptera flavomarginata, *C. B.* 153.

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BLEPHARODERA CILIATA.

a, *b*. Cape. From M. Brunner de Wattenwyl's collection.

DEROCALYMNA FLAVIPES.

Deropeltis flavipes, *C. B.* 180—Derocalymna flavicornis? *C. B.* 181.

DEROCALYMNA GLOMERIS.

Perisphæria Glomeris, *C. B.* 170.

DEROCALYMNA HUMBERTIANA.

Perisphæria Humbertiana, *C. B.* 170—Derocalymna atra, *Brun.* ?

DEROCALYMNA SERICEA.

Blepharodera sericea, *C. B.* 180.

DEROCALYMNA EMORTUALIS.

Blepharodera emortualis, *C. B.* 180.

DEROCALYMNA ORIENTALIS.

Perisphæria orientalis, *C. B.* 180—Perisphæria Humbertiana? *C. B.* 170.

HORMETICA SURINAMA.

Surinama, *Sauss. Rev. Zool.* XX. 100.
Surinam.

GROMPHADORHINA PORTENTOSA, *C. D.* i. 124.

Hormetica Coquereliana, *C. B.* 55.

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SUPPLEMENT

TO THE

CATALOGUE OF DERMAPTERA SALTATORIA.

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TRIDACTYLUS APICALIS.

a. Mexico. From M. Brunner de Wattenwyl's collection.

Page 8.

TRIDACTYLUS NIGRÆNEUS.

Æneo-niger; antennæ nigræ, prothorace paullo longiores; femora postica abdomine paullo longiora; tibiæ posticæ piceæ; tarsi pallide testacei, apice nigricantes.

Æneous-black. Eyes livid. Antennæ black, a little longer than the prothorax. Hind femora a little longer than the abdomen. Hind tibiæ piceous. Tarsi pale testaceous, their tips blackish. Length of the body $1\frac{3}{4}$—2 lines.

a. Ceylon. Presented by Dr. Thwaites.

TRIDACTYLUS OPACUS.

Mas. *Niger, opacus, fere cylindricus; genua quatuor anteriora fulva; tarsi quatuor anteriores testacei, apice nigri; femora postica testaceo uniguttata; tibiæ tarsique postica pallide testacea; alæ anticæ cinereæ, abdomen paullo superantes.*

Male. Black, dull, nearly cylindrical. Cerci piceous. Four anterior knees tawny; four anterior tarsi testaceous, with black tips. Hind femora with a testaceous dot on the upper side at one-third of the length; hind tibiæ and hind tarsi pale testaceous. Fore wings cinereous, extending a little beyond the abdomen. Length of the body 2 lines; expansion of the fore wings 3 lines.

a. Ceylon. Presented by Dr. Thwaites.

The species referred to Scudder "Cent. Orth. Dec. Gryll." are published by that author in the Proc. Bost. Soc. Nat. Hist. xii. 139—143.

Genus HEMIMERUS.

Mas. Corpus ellipticum, glabrum, apterum, subdepressum. Caput transversum, fere semicirculare. Oculi nulli? Antennæ 11-articulatæ, fere filiformes, prothorace vix longiores; articulus 1us longus, validus; 2us mediocris. Prothorax transversus, antice paullo angustior, margine antico lateribusque subrotundatis, margine postico excavato. Mesothorax et metathorax bene determinati. Propectus et mesopectus maxima. Segmenta abdominalia brevia. Cerci setacei, abdomini æquilongi. Pedes brevissimi, latissimi; tibiæ fossoriæ; tarsi brevissimi.

Male. Body elliptical, smooth, shining, wingless, rather flat. Head transverse, nearly semicircular. Eyes not apparent. Mouth small. Antennæ 11-jointed, nearly filiform, hardly longer than the prothorax; first joint long, stout; second about half the length of the first; following joints short, successively increasing in length. Prothorax transverse, a little narrower in front, with a slight longitudinal impressed line; fore border and sides slightly rounded; hind border concave. Mesothorax and metathorax well developed. Propectus and mesopectus very large. Metapectus rather large. Abdominal segments short. Cerci setaceous, as long as the abdomen. Legs very short and broad; tibiæ fossorial; tarsi extremely short.

1. Hemimerus talpoides.

Mas. *Fulvus; antennæ testaceæ.*

Male. Tawny. Antennæ testaceous. Length of the body 4½ lines.

a—d. Sierra Leone. From Mr. Foxcroft's collection.
e. W. Africa. From Mr. Fraser's collection.

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Brachytrypes signatipes.

Mas. *Fulvus, nitens, fere cylindricus; caput prothorace paullo latius, antennæ corpore longiores; prothorax antice latior, lateribus testaceis; cerci abdomine multo breviores; pedes robusti, femoribus posticis extus ferrugineo oblique strigatis; alæ anticæ abdominis dimidio paullo longiores; alæ posticæ brevissimæ.*

Male. Tawny, shining, nearly cylindrical, paler beneath. Head a little broader than the prothorax; fore part paler. Eyes piceous, nearly round, not prominent. Antennæ longer than the body. Prothorax broader in front, irregularly testaceous along the sides, with a longitudinal impressed line, and with two slight transverse furrows, the anterior one widely interrupted. Cerci a little more than half the length of the abdomen. Legs stout; fore legs more setulose than the others; hind femora on the outer side with numerous oblique parallel streaks of ferruginous dots; hind tibiæ short, thick, their spines with black tips. Fore wings a little more than half the length of the abdomen. Hind wings much shorter than the fore wings. Length of the body 12 lines.

a. Bombay. Presented by Dr. Leith.

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GRYLLUS SQUAMIGER.

a—*c*. Dalmatia. From M. Brunner de Wattenwyl's collection.

GRYLLUS APTERUS.

a—*d*. Dalmatia. From M. Brunner de Wattenwyl's collection.

GRYLLUS BURDIGALENSIS.

a—*d*. Dalmatia. From M. Brunner de Wattenwyl's collection.
e. *Var.* alis longis. Dalmatia. From M. Brunner de Wattenwyl's collection.

GRYLLUS FRONTALIS.

a, *b*. Austria. From M. Brunner de Wattenwyl's collection.
c. Transylvania. From M. Brunner de Wattenwyl's collection.
d. Asia Minor. From M. Brunner de Wattenwyl's collection.

GRYLLUS MELAS.

a—*d*. Dalmatia. From M. Brunner de Wattenwyl's collection.
e. Croatia. From M. Brunner de Wattenwyl's collection.
f. Asia Minor. From M. Brunner de Wattenwyl's collection.

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GRYLLUS NEGLECTUS.

a. Massachusetts. From M. Brunner de Wattenwyl's collection.

GRYLLUS CINEREUS.

cinereus, *Costa*, *Fauna del Regno di Napoli*.
Naples.

GRYLLUS GOSSYPII.

Gossypii, *Costa*, *Fauna del Regno di Napoli*.
Naples.

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GRYLLUS LINEATICEPS.

lineaticeps, *Stal*, *Eug. Resa*, 314.
California.

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GRYLLUS NITIDULUS.

nitidulus, *Stal*, *Eug. Resa*, 315.
Buenos Ayres.

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Gryllus lugubris.

lugubris, *Stal*, *Ofv. K. V. Ak. Forh.* 1855, 351.
Sennaar.

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Gryllus conjunctus.

conjunctus, *Stal*, *Eug. Resa*, 315.
Java.

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Gryllus Brunneri.

Brunneri, *De Selys*, *Ann. Soc. Ent. Bely.* xi. 27.
Introduced into Belgium.

Gryllus debilis.

Mas. *Fuscus, subtus testaceus; caput nitens, gutta frontali facieque testaceis; antennæ fulvæ; prothorax subtilissime punctatus, longitudinaliter et transverse unisulcatus, vittis duabus lateralibus pallide testaceis; cerci abdomine breviores; femora postica extus fusco univittata; alæ anticæ diaphanæ, abdominis apicem non attingentes, vitta subcostali spatioque apicali fuscis.*

Male. Brown, testaceous beneath. Head smooth, shining; a dot between the sockets of the antennæ, and fore part testaceous. Eyes and antennæ tawny. Prothorax subquadrate, shining, very minutely punctured, a little narrower in front, with two impressed lines, one transverse, the other longitudinal; a pale testaceous marginal stripe on each side, broadest towards the fore border. Cerci rather shorter than the abdomen. Legs testaceous; hind femora with a brown stripe on the outer side; hind tibiæ very much shorter than the hind femora, their spines with black tips. Fore wings pellucid, not extending to the tip of the abdomen, brown towards the tips, and with a brown subcostal stripe. Hind wings pellucid, extending much beyond the abdomen. Length of the body 10 lines; expansion of the fore wings 14½ lines.

Much resembling G. angustulus, from which it may be distinguished by the entirely pale sides of the prothorax.

a. Chontales, Nicaragua. From Mr. Janson's collection.

Gryllus pallipes.

G. (Micrognyllus) pallipes, *Philippi*, *Zeitschr. gesammt. Naturwiss.* xxi. 231.

Chili.

Gryllus griseus.

G. (Microgryllus) griseus, *Philippi, Zeitschr. gesammt. Naturwiss.* xxi. Chili.

Gryllus facialis.

Mas. *Testaceus; caput nigrum, guttis duabus macula elongata margine antico palpisque testaceis; antennæ fulvæ, corpore longiores; prothorax niger, tomentosus, vittis duabus lateralibus testaceis latis abbreviatis; abdominis dorsum nigricans; cerci fulvi, abdomini æquilongi; alæ anticæ luridæ, abdominis dimidio æquilongæ, apud costam albidæ, striga basali nigra; alæ posticæ diaphanæ, abdomen longe superantes.*

Male. Testaceous. Head black, shining; a dot on each side near the antennæ, sockets of the antennæ, an elongated spot between them, fore part of the head and palpi testaceous. Antennæ tawny, longer than the body. Prothorax black, tomentose; sides with a broad testaceous stripe, which does not extend to the hind border. Abdomen blackish above. Cerci tawny, as long as the abdomen. Fore wings lurid, extending to half the length of the abdomen, whitish along the costa; a black streak extending from the base. Hind wings pellucid, extending much beyond the abdomen. Length of the body 10 lines.

Much like G. spurcatus, but differing from it in the pale fore part of the head.

a. Bombay. Presented by Dr. Leith.

Gryllus humeralis.

Mas. *Testaceus; caput nigrum, antice testaceum; antennæ piceæ; prothorax niger, nitens, linea antice dilatata strigisque duabus transversis latis lanceolatis rufis, vittis duabus lateralibus flavis latis arcuatis; abdomen piceum; cerci fulvi, abdomine breviores; femora postica extus ferrugineo unistrigata; alæ anticæ luridæ, basi testaceæ, apud costam diaphanæ, abdomini æquilongæ; alæ posticæ diaphanæ, abdomen longe superantes.*

Male. Testaceous. Head black, shining, testaceous in front of the eyes and on each side; sockets of the antennæ testaceous. Antennæ piceous. Prothorax black, shining; a red line on the disk, dilated on the fore border; a transverse broad lanceolate red streak on each side; a broad curved yellow marginal stripe on each side, widest in front. Abdomen piceous. Cerci tawny, shorter than the abdomen. Hind femora with a ferruginous streak on the outer side. Fore wings lurid, extending to the tip of the abdomen, testaceous at the base, pellucid along the costa. Hind wings pellucid, extending much beyond the abdomen. Length of the body 11 lines.

The colour of the hind legs distinguishes it from G. elegans.

a. Bombay. Presented by Dr. Leith.

Gryllus transversalis.

Fœm. *Testaceus, caput fasciis duabus plagaque anteriore lituram flavam furcatam includente nigris; antennæ piceæ, corpore multo longiores; prothorax piceus, tomentosus; oviductus abdomine multo longior; femora postica valde incrassata; alæ anticæ fuscescentes, apud costam diaphanæ, abdomini æquilongæ, basi lineaque subcostali testaceis; alæ posticæ diaphanæ, abdomen longissime superantes.*

Female. Testaceous. Head short, with two black bands; first band on the fore border; second between the eyes; a large anterior black patch including the front and with a forked yellow mark on its disk. Eyes tawny. Antennæ piceous, much longer than the body. Prothorax piceous, tomentose, rather short, with a longitudinal impressed line. Oviduct much longer than the abdomen. Hind femora very thick. Fore wings brownish, extending to the tip of the abdomen, testaceous at the base and with a testaceous line near the costa, where there is a pellucid space. Hind wings pellucid, extending very much beyond the abdomen. Length of the body 9 lines.

This species and G. spurcatus have thick hind tibiæ, but the bands of the head distinguish the former from the latter.

a. Bombay. Presented by Dr. Leith.

Gryllus guttiventris.

Mas. *Piceus; caput nigrum, fascia postica margine antico palpisque fulvis; prothorax tomentosus, testaceo postice bilituratus; segmenta ventralia testaceo uniguttata; alæ anticæ striga basali nigra, abdominis apicem fere attingentes; alæ posticæ abdomen longe superantes.*

Male. Piceous. Head black, shining, with a tawny band along the hind border and with three pale yellow dots between the eyes; mouth and palpi tawny; mandibles reddish, piceous towards the tips. Prothorax tomentose, with a testaceous mark on each side of the hind border and with a longitudinal impressed line. Abdomen with a testaceous dot on each of the ventral segments from the first to the fifth. Trochanters testaceous. Wings pellucid. Fore wings extending nearly to the tip of the abdomen, with a black streak extending from the base. Hind wings extending much beyond the abdomen. Length of the body 8 lines.

Less stout than G. spurcatus, to which it is most nearly allied.

a. Bombay. Presented by Dr. Leith.

Gryllus ferricollis.

Mas. *Niger; caput subtus testaceum; palpi pedesque picei; prothorax ferrugineus, tomentosus; venter basi fulvus; cerci abdomine breviores; alæ diaphanæ; alæ anticæ abdomine breviores; alæ posticæ abdomen longe superantes.*

Male. Black. Head shining, testaceous beneath. Mandibles reddish; tips black. Eyes livid. Palpi piceous. Prothorax ferruginous, tomentose, with a longitudinal impressed line. Ventral segments tawny

towards the base. Legs piceous. Cerci shorter than the abdomen. Wings pellucid. Fore wings somewhat shorter than the abdomen. Hind wings extending much beyond the abdomen. Length of the body 9 lines.

The band on the head of G. confirmatus distinguishes it from this species.

a. Bombay. Presented by Dr. Leith.

Gryllus angustulus.

Fœm. *Testaceus, sat gracilis; caput nigrum, subtus testaceum; antennæ piceæ, corpore longiores; prothorax nigricans, tomentosus, antice latior, testaceo bivittatus; cerci et oviductus picei, abdomine multo longiores; pedes picei, femoribus subtus sordide testaceis; alæ anticæ cinereæ, abdominis apicem fere attingentes; alæ posticæ diaphanæ, abdomen longe superantes.*

Female. Testaceous, rather narrow. Head black, shining, testaceous beneath and along the hinder part of the eyes, which are black; a pale yellow mark on the hind part of the orbit of each antenna. Antennæ piceous, longer than the body. Prothorax blackish, tomentose, widening in front; a narrow testaceous stripe on each side, very near but not connected with the border. Cerci and oviduct piceous, nearly equal in length, much longer than the abdomen. Legs piceous; femora dingy testaceous beneath. Fore wings cinereous, extending nearly to the tip of the abdomen. Legs piceous; femora dingy testaceous beneath. Fore wings cinereous, extending nearly to the tip of the abdomen. Hind wings pellucid, extending very much beyond the abdomen. Length of the body $7\frac{1}{2}$ lines.

It has some resemblance to G. concisus, but the hind tibiæ are much longer.

a. Bombay. Presented by Dr. Leith.

Gryllus lineiceps.

Mas et fœm. *Testaceus, sat gracilis; caput supra nigrum, fasciis tribus strigaque longitudinali flavis; antennæ nigræ, corpore longiores; prothorax niger, opacus, plagis duabus elongatis lineisque duabus late interruptis testaceis; abdominis dorsum nigricans; cerci picei, abdomine permulto longiores; oviductus abdomini æquilongus; alæ diaphanæ; alæ anticæ abdomine vix breviores; alæ posticæ abdomen longe superantes.*

Male and female. Testaceous, rather slender. Head black and shining above; a band on the hind border, a slender band on the vertex, a broader band on the face and a longitudinal streak between the sockets of the antennæ yellow. Mandibles and palpi testaceous. Eyes livid. Antennæ black, longer than the body. Prothorax black, dull, with an elongated testaceous patch and a widely interrupted submarginal testaceous line on each side. Abdomen blackish above. Cerci piceous, very much longer than the abdomen. Oviduct as long as the abdomen. Wings

pellucid. Fore wings nearly as long as the abdomen. Hind wings extending much beyond the abdomen. Length of the body $5\frac{1}{2}$—6 lines.

It has more slender legs than G. concisus, and the band of the vertex distinguishes it from G. minusculus.

a. Bombay. Presented by Dr. Leith.

Gryllus configuratus.

Fœm. *Niger; caput postice luteo sexstrigatum; pectus testaceum; cerci abdomine paullo longiores; oviductus abdomine multo longior; alæ anticæ cinereæ, abdomidis apicem attingentes; alæ posticæ diaphanæ, abdomen longe superantes.*

Female. Black. Head shining; hind part with six longitudinal luteous streaks. Prothorax with three rows of short longitudinal luteous streaks; inmost pair of streaks in the middle row converging forward. Pectus testaceous. Cerci a little longer than the abdomen. Oviduct much longer than the abdomen. Fore wings cinereous, extending to the tip of the abdomen. Hind wings pellucid, extending very much beyond the abdomen. Length of the body 6 lines.

It has some resemblance to G. conspersus as regards the markings of the prothorax, but those of the head are different, and it has shorter hind tibiæ.

a. Bombay. Presented by Dr. Leith.

Gryllus parviceps.

Mas. *Piceus, nitens, subtus testaceus; caput parvum, antice testaceum; prothorax albido bivittatus, antice angustior, lateribus rotundatis; cerci abdomine breviores; pedes testacei; alæ diaphanæ; alæ anticæ abdominis apicem attingentes; alæ posticæ abdomen longe superantes.*

Male. Piceous, testaceous beneath. Head and prothorax shining. Head small, as broad as the fore border of the prothorax, testaceous between the antennæ and the mouth. Antennæ testaceous. Prothorax decreasing in breadth from the hind border to the fore border; sides rounded, with a whitish stripe. Cerci shorter than the abdomen. Legs testaceous. Wings pellucid. Fore wings extending to the tip of the abdomen. Hind wings extending much beyond the abdomen. Length of the body 6 lines.

The smaller head distinguishes it from all the other Asiatic species of Gryllus.

a. Bombay. Presented by Dr. Leith.

Gryllus signipes.

Fœm. *Niger; caput nitens, fascia antica angusta guttoque anteriore luteis, facie clypeoque luteo marginatis; prothorax opacus, strigis duabus lateralibus anticis pallide testaceis; venter basi testaceus; oviductus ferrugineus, apice piceus, corpore paullo brevior; pedes testacei, femoribus posticis extus strigis obliquis nigricantibus bis interruptis, femoribus quatuor anterioribus nigricante notatis; alæ anticæ fuscæ, abdominis apicem fere attingentes.*

Female. Black. Head shining, with a narrow luteous band on the fore part of the vertex and with a luteous dot between the sockets of the antennæ; face and clypeus bordered with luteous. Palpi testaceous. Antennæ longer than the body. Prothorax dull, with a short pale testaceous streak along the fore end of each side. Abdomen testaceous at the base beneath. Cerci longer than the abdomen. Oviduct ferruginous, piceous at the tip, a little shorter than the body. Legs testaceous; hind femora on the outer side with many oblique blackish streaks, which are interrupted by two testaceous longitudinal lines; four anterior femora with several blackish marks above; hind tibiæ much shorter than the hind femora, with stout pale testaceous spines along each side. Fore wings brown, extending nearly to the tip of the abdomen. Hind wings cinereous, extending much beyond the abdomen. Length of the body 6 lines; expansion of the fore wings 9 lines.

It has most affinity in structure to G. angustulus; the hind tibiæ are shorter.

a. Bombay. Presented by Dr. Leith.

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Mogoplistes brunneus.

a—d. Dalmatia. From M. Brunner de Wattenwyl's collection.

Mogoplistes squamosus.

squamosus, *Fischer*.

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

Mogoplistes angustus.

a, *b*. Dalmatia. From M. Brunner de Wattenwyl's collection.

Genus ARACHNOCEPHALUS.

Arachnocephalus, *Costa*, *Fauna del Regno di Napoli*.

1. Arachnocephalus vestitus.

vestitus, *Costa*, *Fauna del Regno di Napoli*.

Naples.

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Nemobius Heydenii.

a—d. Hungary. From M. Brunner de Wattenwyl's collection.

Nemobius fasciatus.

frontalis, *Fieb. Mon.* 126, pl. 10, f. 11.

Austria, Bohemia.

NEMOBIUS LATERALIS.

lateralis, *Costa, Fauna del Regno di Napoli.*

Naples.

NEMOBIUS AVERNI.

Averni, *Costa, Fauna del Regno di Napoli.*

Naples.

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NEMOBIUS ORTONII.

Ortonii, *Scudder, Bost. Soc. Nat. Hist.* xii.

Napo or Maranon.

NEMOBIUS VAGUS.

Mas. *Fulvus, subtus testaceus; caput et prothorax nigro setosa; antennæ fuscæ, basi testaceæ, corpore multo longiores; abdominis dorsum nigricans; cerci fulvi, abdomine paullo breviores; pedes testacei, tibiis posticis utrinque quinque spinosis; alæ anticæ fuscescentes, apud costam diaphanæ, abdominis apicem non attingentes.* Fœm?— *Multo minor.*

Male. Tawny. Head and prothorax with black bristles. Head in front and beneath and under side of the body testaceous. Eyes blackish, oblique, elliptical. Antennæ brown, testaceous at the base, much longer than the body. Prothorax transverse, subquadrate. Abdomen blackish above. Cerci tawny, a little shorter than the abdomen. Styles tawny, less than half the length of the cerci. Legs testaceous; hind tibiæ much shorter than the hind femora, armed on each side with five slender spines which successively increase in length towards the tips. Fore wings brownish, pellucid along the costa, not extending to the tip of the abdomen. Hind wings pellucid, about twice the length of the abdomen. Length of the body 4 lines; expansion of the fore wings 4 lines.

Female? Much smaller. Oviduct nearly as long as the abdomen. Length of the body 2½ lines.

a, b. Bombay. Presented by Dr. Leith.

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ENEOPTERA CONCOLOR.

Mas. *Fulva, setosa; antennæ piceæ; cerci abdomini æquilongi; tibiæ posticæ utrinque quadrispinosæ; alæ diaphanæ; alæ anticæ abdominis apicem fere attingentes; alæ posticæ abdomine duplo longiores.*

Male. Tawny. Head and prothorax setose; bristles black. Head as broad as the prothorax. Eyes black, not prominent. Antennæ piceous. Prothorax transverse; impressed transverse line very slight. Cerci as long as the abdomen. Four anterior legs setose. Hind tibiæ with four long

spines on each side. Wings pellucid. Fore wings extending nearly to the tip of the abdomen. Hind wings twice the length of the abdomen. Length of the body $3\frac{1}{2}$—4 lines.

a. Bombay. Presented by Dr. Leith.

Eneoptera lateralis.

Mas et fœm. *Testacea, setosa, nigricante bivittata, capitis vertex et prothoracis discus fusci aut fusco varii; cerci et oviductus abdomini æquilongi; alæ anticæ cinereæ, nigricante univittatæ, abdominis apicem fere attingentes; alæ posticæ diaphanæ, abdomine duplo longiores.*

Male and female. Testaceous. Head and prothorax setose; vertex and disk of the prothorax varied with brown or wholly brown. Eyes piceous. Prothorax transverse, with a broad blackish stripe along each side, this stripe continued more or less along each side of the abdomen. Cerci and oviduct as long as the abdomen. Fore wings cinereous, with a blackish stripe, extending nearly to the tip of the abdomen. Hind wings pellucid, twice the length of the abdomen. Length of the body $2\frac{1}{2}$—3 lines.

a. Bombay. Presented by Dr. Leith.

Eneoptera alboatra.

Mas et fœm. *Nigra, subsetosa; palpi albi, basi nigri; antennæ piceæ, corpore multo longiores; cerci abdomini æquilongi, basi albo fasciati; oviductus ferrugineus, abdomine paullo brevior; pedes albo fasciati; alæ anticæ nigricantes, abdominis apicem attingentes.*

Male and female. Black. Head and prothorax slightly setose. Eyes tawny or reddish. Palpi white; first joint black. Antennæ piceous, much longer than the body. Cerci as long as the abdomen, with a white band near the base. Oviduct ferruginous, a little shorter than the abdomen. Four anterior femora for half the length from the base and coxæ white. Hind femora white, with three black bands. Tibiæ and tarsi with whitish bands. Fore wings blackish, extending to the tip of the abdomen. Length of the body $2\frac{1}{4}$—$2\frac{1}{2}$ lines.

a. Bombay. Presented by Dr. Leith.

Eneoptera œdemeroides.

Mas. *Testacea, tenuis, sublinearis; caput prothorax vix latius; oculi valde prominuli; femora postica corpore vix breviora, vitta interiore nigra lanceolata basi furcata; tibiæ posticæ quadrispinosæ; alæ anticæ abdomen sat superantes; alæ posticæ diaphanæ, longissimæ.*

Male. Testaceous, narrow, nearly linear. Head hardly broader than the prothorax. Eyes livid, round, very prominent. Antennæ blackish above at the base. Hind femora nearly as long as the body, adorned on the inner side with a black lanceolate stripe, which is forked towards the base; hind tibiæ as long as the hind femora, with four slender spines and with two apical spines. Fore wings extending somewhat beyond the

abdomen. Hind wings pellucid, nearly twice the length of the body. Length of the body 2½ lines; expansion of the fore wings 4½ lines.

a. Ceylon. Presented by Dr. Thwaites.

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PLATYDACTYLUS FASCIATUS.

fasciatus, *Scudder, Bost. Soc. Nat. Hist.* xii.

Napo or Maranon.

PLATYDACTYLUS NOTATIPES.

Mas. *Testaceus; caput apud marginem posticum nigricans; prothorax lateribus margine postico strigisque duabus obliquis nigris; cerci abdomine multo breviores; pedes longi, nigro fasciati, tibiis posticis extus trispinosis intus unispinosis; alæ anticæ diaphanæ, fusco nebulosæ, abdomen sat superantes.*

Male. Testaceous, shining. Head irregularly blackish along the hind border. Eyes brown, elongate-oval, rather prominent. Prothorax widening towards the fore border, black along the hind border and along each side and with an oblique black streak on each side of the disk. Cerci much shorter than the abdomen. Legs long, slender; femora and tibiæ with black bands; hind femora much longer than the abdomen; hind tibiæ as long as the hind femora, with three long slender spines on the outer side and with one on the inner side. Wings pellucid. Fore wings partly clouded with brown, extending rather beyond the abdomen. Hind wings extending much beyond the fore wings. Length of the body 8 lines; expansion of the fore wings 17 lines.

The banded legs distinguish it from the other Asiatic and Australasian species.

a. Ceram. From Madame Ida Pfeiffer's collection.

PLATYDACTYLUS DIVERSUS.

Fœm. *Ferrugineus, pubescens, subtilissime punctatus; vagina fere recta, apice nigra, abdomine longior; cerci graciles, vagina longiores; femora postica testacea, extus fusco bivittata; tibiæ posticæ spinulosæ, sexspinosæ; alæ anticæ apud costam pallidiores; alæ posticæ cinereæ, apice ferrugineæ.*

Female. Ferruginous. Head and prothorax pubescent, extremely minutely punctured. Head a little narrower than the prothorax; tip of the vertex short. Eyes livid, oval. Fourth joint of the maxillary palpi clavate, obliquely truncated. Prothorax with two very slight transverse impressed lines; fore border nearly straight; sides and middle part of hind border rounded. Sheaths of the oviduct nearly straight, black at the tips, rather longer than the abdomen. Cerci slender, a little shorter than the sheaths of the oviduct. Hind femora testaceous, much longer than the abdomen, with two brown stripes on the outer side; hind tibiæ as long as the hind femora, with six long spines and with many minute spines on each side. Fore wings rather longer than the body, paler along the costa.

Hind wings cinereous, ferruginous at the tips, somewhat longer than the fore wings. Length of the body 10 lines; expansion of the fore wings 26 lines.

Very near P. Columbicus; a little more slender and much darker.

a. Chontales, Nicaragua. From Mr. Janson's collection.

PLATYDACTYLUS LITURATUS.

Fœm. *Testaceus, subpubescens; caput nigricante quadrimaculatum et uniplagiatum; prothorax lituris sex anticis punctis nonnullis fasciaque postica interrupta nigricantibus; vagina nigra, recta, abdomini æquilonga; pedes breviusculi, femoribus posticis nigricante uniplagiatis et unistrigatis, tibiis quatuor anterioribus nigro unimaculatis; alæ diaphanæ; ala antica sinistra basi nigricante uniguttata.*

Female. Testaceous. Head and prothorax slightly pubescent. Head with four blackish spots on the hind border and with a blackish patch on the tip of the vertex. Prothorax with six blackish marks on the fore border, with some blackish points in the disk and with an interrupted blackish band on the hind border. Sheaths of the oviduct black, straight, as long as the abdomen. Legs rather short; four anterior tibiæ with a black spot near the base; hind femora with a blackish elongated patch and a blackish streak on the outer side; hind tibiæ shorter than the hiud femora, their five spines on each side black at the base. Wings pellucid. Fore wings extending much beyond the abdomen, the left one with a blackish dot at the base. Hind wings extending rather beyond the fore wings. Length of the body 9 lines; expansion of the fore wings 18 lines.

Most nearly allied to P. similis, from which it is distinguished by the shorter tibiæ and by the points on the fore wings.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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PLATYDACTYLUS PACIFICUS.

Mas. *Testaceus, nitens; caput et prothorax fulva; oculi valde prominuli; prothorax dorso postice sublatescente, lateribus postice angustioribus; cerci subtiliter pilosi, abdomine longiores; tibiæ posticæ utrinque trispinosæ; alæ anticæ latæ, abdomen paullo superantes.*

Male. Testaceous, shining. Head and prothorax tawny, pubescent. Head convex, smooth, as broad as the fore border of the prothorax; front erect. Eyes oval, very prominent. Prothorax widening slightly above from the fore border to the hind border, with two transverse impressed lines, of which the anterior one is interrupted in the middle; sides contracted towards the hind border. Cerci finely pilose, rather longer than the abdomen. Legs pubescent; hind femora incrassated, slender towards the tips, rather longer than the abdomen; hind tibiæ as long as the hind femora, with three long spines on each side and with two longer apical spines.

Fore wings broad, extending a little beyond the abdomen; subcostal transverse veins long, regular. Length of the body 8 lines; expansion of the fore wings 16 lines.

Distinguished from other species of the genus by the more prominent eyes.

a. Vavou, Pacific Ocean. Presented by J. Brenchley, Esq.

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NISITRA MACULOSA.

Mas. *Fulva; caput parvum; antennæ piceæ, corpore longiores; prothorax fascia discali abbreviata incisa maculisque duabus testaceis; cerci abdomine vix breviores; pedes longi, graciles, fusco fasciati, tibiis posticis trispinosis; alæ anticæ cinereæ, fusco nebulosæ, abdomen superantes; alæ posticæ multo longiores.*

Male. Tawny. Head small, paler in front. Eyes piceous, oval, slightly prominent. Antennæ piceous, slender, longer than the body. Prothorax narrower in front above, wider in front on the sides, with an irregular notched abbreviated testaceous band in the disk and with two testaceous spots on each side. Cerci nearly as long as the abdomen. Legs long, slender; femora and tibiæ with irregular brown bands; hind tibiæ as long as the hind femora, with three long spines. Wings cinereous. Fore wings partly clouded with brown, extending rather beyond the abdomen. Hind wings longer than the fore wings. Length of the body 9 lines.

a. Ceram. From Madame Ida Pfeiffer's collection.

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ŒCANTHUS NIVEUS.

a—f. Massachusetts. Presented by F. Walker, Esq.

ŒCANTHUS FILIGER.

Fœm. *Pallide stramineus, gracillimus; caput antice productum; antennæ corpore multo longiores; oviductus abdomine valde longior; cerci oviductu multo breviores; femora postica corpore breviora; tibiæ posticæ spinulosæ; alæ anticæ diaphanæ, corpore longiores; alæ posticæ longissimæ.*

Female. Pale straw-colour, linear, very slender. Head elongated in front. Antennæ very slender, much longer than the body. Oviduct much longer than the abdomen. Cerci much shorter than the oviduct. Hind femora shorter than the body; hind tibiæ as long as the hind femora, with a row of very minute spines and with a few longer spines towards the tips. Wings pellucid. Fore wings longer than the body. Hind wings much longer than the fore wings. Length of the body 5 lines; expansion of the fore wings 12 lines.

a. Natal. From M. Gueinzius' collection.

Œcanthus necydaloides.

Mas. *Pallide testaceus, gracilis; caput prothorace paullo latius, fastigio triangulari antice sulcato; oculi subprominuli; antennæ corpore multo longiores, basi incrassatæ; prothorax subquadratus, lineis duabus transversis impressis; cerci abdomine longiores; femora postica abdomine paullo longiora; tibiæ posticæ spinulosæ; alæ anticæ abdomen non superantes; alæ posticæ diaphanæ, longissimæ.*

Male. Pale testaceous, slender, nearly linear. Head a little broader than the prothorax; fastigium triangular, furrowed in front. Eyes tawny, round, slightly prominent. Antennæ slender, much longer than the body, thick at the base. Prothorax subquadrate, slightly transverse, with two transverse impressed lines. Cerci pubescent, longer than the abdomen. Hind femora a little longer than the abdomen; hind tibiæ pubescent, with very minute spines, shorter than the hind femora. Fore wings extending to the tip of the abdomen. Hind wings pellucid, much longer than the fore wings. Length of the body 7 lines; expansion of the fore wings 12 lines.

a. Ceylon. Presented by Dr. Templeton.

Page 101.

Genus PILUGIS.

Pilugis, *Stal, Eug. Resa*, 324.

1. Pilugis teres.

Locusta teres, *Deg. Ins.* iii. 458, pl. 40, f. 5—Pilugis teres, *Stal, Eug. Resa*, 324.

Surinam.

The genera Phisis and Pilugis may be reunited. P. teres is probably the species here described.

Mas. *Pallide straminea, gracillima; caput prothorace paullo latius; oculi valde prominuli; antennæ gracillimæ, corpore duplo longiores; femora postica corpore breviora, basi incrassata; tibiæ posticæ subtilissime spinulosæ; pedes antici spinis longis armati; alæ anticæ diaphanæ, corpore longiores; alæ posticæ longissimæ.*

Male. Pale straw-colour, very slender, nearly linear. Head a little broader than the prothorax. Eyes brownish, very prominent. Antennæ very slender, about twice the length of the body. Abdomen with long apical appendages. Hind femora shorter than the body, incrassated towards the base; hind tibiæ a little longer than the hind femora, with extremely minute spines. Fore femora and fore tibiæ with a row of slender spines beneath; spines of the tibiæ much longer than those of the femora. Wings pellucid; veins pale straw-colour. Fore wings longer than the

body, much shorter than the hind wings. Length of the body 5 lines; expansion of the fore wings 15 lines.

a. Brazil. Presented by J. P. G. Smith, Esq.
b. Santarem. From Mr. Bates' collection.

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TRIGONIDIUM GRACILE.

gracile, *Scudder*, *Bost. Soc. Nat. Hist.* xii.
Napo River.

TRIGONIDIUM PALLENS.

pallens, *Stal*, *Eug. Resa*, 318.
Rio Janeiro.

TRIGONIDIUM TIBIALE.

tibiale, *Stal*, *Eug. Resa*, 316.
Mauritius.

TRIGONIDIUM FUSCICORNE.

fuscicorne, *Stal*, *Eug. Resa*, 318.
Isle Ascension.

TRIGONIDIUM PALLIDICORNE.

pallidicorne, *Stal*, *Eug. Resa*, 317.
Hong Kong.

TRIGONIDIUM BICOLOR.

bicolor, *Stal*, *Eug. Resa*, 317.
Java.

TRIGONIDIUM PALLIPES.

pallipes, *Stal*, *Eug. Resa*, 316.
Singapore.

TRIGONIDIUM COLEOPTRATUM.

coleoptratum, *Stal*, *Eug. Resa*, 316.
Java.

TRIGONIDIUM VITTATICOLLE.

vittaticolle, *Stal*, *Eug. Resa*, 317.
Manilla.

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PHALANGOPSIS APTERA.

aptera, *Herr.-Sch.*
a—*c*. Dalmatia. From M. Brunner de Wattenwyl's collection.

PHALANGOPSIS LINDERII.

Linderii, *L. Duf. A. S. E. F.* 4*me Ser.* i. 13.

Caves in the Pyrenees.

PHALANGOPSIS LIMOSA.

Mas. *Nigricans, subtus sordide testacea; capitis latera testacea; antennæ corpore plus duplo longiores, basi incrassatæ; prothorax opacus, sulcis duabus obliquis, vittis duabus lateralibus angustis testaceis; cerci picei, abdomini æquilongi; pedes sordide testacei, femoribus posticis fascia subapicali fusca, tibiis posticis fusco bifasciatis; alæ anticæ ferrugineæ, abdomen paullo superantes.*

Male. Blackish, dull testaceous beneath. Head on each side and palpi testaceous. Eyes livid, prominent. Antennæ much more than twice the length of the body; first joint incrassated. Prothorax dull, with an oblique furrow on each side of the disk; a narrow testaceous stripe along each side, which is rounded and blackish. Cerci piceous, as long as the abdomen. Legs dull testaceous; hind femora much longer than the abdomen, with a brown subapical band; hind tibiæ with two brown bands, rather shorter than the hind femora. Wings extending a little beyond the tip of the abdomen. Fore wings ferruginous. Length of the body 9 lines; expansion of the fore wings 15 lines.

The antennæ without bands, the paler and stouter legs and the more numerous veins of the fore wings distinguish it from P. reticulata.

a. Sierra Leone. From Mr. Salmon's collection.

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PLATYBLEMMUS CALIENDRUM.

a, *b*. Tangier. From M. Brunner de Wattenwyl's collection.

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Genus CONDYLOMERA.

Condylomera, *Westw. Trans. Linn. Soc.* xviii. 419.

CONDYLOMERA TRICONDYLOIDES.

tricondyloides, *Westw. Trans. Linn. Soc.* xviii. 419, pl. 28, f. 7.

Java.

Genus HIRPINUS.

Hirpinus, *Stal, Ofv. K. V. Ak. Forh.* 1855, 351.

1. HIRPINUS AFER.

afer, *Stal, Ofv. K. V. Ak. Forh.* 1855, 351.

Natal.

Genus MELOIMORPHA, *C. D. S.* iii. 468.

1. Meloimorpha cincticornis, *C. D. S.* iii. 469.

a. Hindostan. Presented by Dr. Leith.

Genus MICROGRYLLACRIS.

Mas. Corpus gracile, apterum, convexum, glabrum, nitens. Caput prothorace multo latius. Oculi oblongi. Palpi breves. Antennæ setaceæ, gracillimæ, corpore quadruplo longiores. Abdomen thorace non longius. Pedes longi, inermes, gracillimi; tarsi brevissimi; femora postica corpore multo longiora, basi incrassata.

Male. Body slender, wingless, convex, smooth, shining. Head as long as and much broader than the prothorax. Eyes oblong. Palpi short. Antennæ very slender, about four times the length of the body. Abdomen not longer than the thorax. Legs long, very slender; tarsi very short; hind femora much longer than the body, incrassated towards the base; hind tibiæ a little longer than the hind femora.

1. Microgryllacris australis.

Mas. *Nigra; tibiæ tarsique picea; femora postica albo uniguttata, apices versus rufa.*

Male. Black. Hind femora red towards the tips, with a white mark on the upper side at half the length. Tibiæ and tarsi piceous. Length of the body 2 lines.

a. Australia. From Mr. Damel's collection.

2. Microgryllacris Sinensis.

Mas. *Rufa; antennæ et pedes nigra; femora postica supra albo uniguttata, subtus albo unistrigata.*

Male. Red. Eyes, antennæ and legs black. Hind femora with a white dot above at one-third of the length, and with a white streak extending from the base beneath. Length of the body 2 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

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Genus PHYLLOSCYRTUS.

Cranistus, *Stal*, *Eug. Resa*, 316.

Phylloscyrtus colliurides.

Cranistus colliurides, *Stal*, *Eug. Resa*, 317—Phylloscyrtus colliurides, *Gerst. Stett. Ent. Zeit.* xxiv. 426.

Phylloscyrtus vittatus.

vittatus, *Gerst. Stett. Ent. Zeit.* xxiv. 428.

British Guiana.

PHYLLOSCYRTUS CICINDELOIDES.

cicindeloides, *Gerst. Stett. Ent. Zeit.* xxiv. 428.

Caraccas.

Genus SCEPASTUS.

Scepastus, *Gerst. Stett. Ent. Zeit.* xxiv. 413.

1. SCEPASTUS PACHYRHYNCHOIDES.

pachyrhynchoides, *Gerst. Stett. Ent. Zeit.* xxiv. 423, pl. 1, f. 3.

Philippine Isles.

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For HISPINUS read HIRPINUS.
For HISPINUS AFER read HIRPINUS AFER.

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GRYLLACRIS SIGNIFERA.

Platydactylus crassipes? *Walk. Ann. Nat. Hist. 3rd Ser.* iv. 221.

GRYLLACRIS TRINOTATA, *C. D. S.* iii. 469.

a. Hindostan. Presented by Dr. Leith.

GRYLLACRIS MAGNICEPS, *C. D. S.* iii. 471.

a. Hindostan. Presented by Dr. Leith.

GRYLLACRIS MACULATA.

maculata, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.

Banka.

GRYLLACRIS TRIPUNCTATA.

tripunctata, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.—fusciſrons? p. 170.

Java.

GRYLLACRIS SIGNIGERA.

Mas. *Testacea; caput supra fuscum, fastigio fronteque nigris, macula frontali pallide flava facie clypeoque fulvis; prothorax nigro univittatus; oviductus reflexus; tibiæ posticæ basi nigræ.*

Male. Testaceous, smooth, shining. Head as broad as the prothorax; vertex brown, except along the hind border; tip black; front black, with a pale yellow elliptical spot; face and clypeus tawny. Antennæ about thrice the length of the body. Prothorax with a black stripe, which is dilated towards the fore border and towards the hind border. Oviduct recurved over the abdomen, and extending to half its length from the base. Hind tibiæ black towards the base. Wings rudimentary. Length of the body 12 lines.

a. Bombay. Presented by Dr. Leith.

Gryllacris simplex.

Mas. *Lutea; caput prothorace paullo latius, fronte bifoveolata; antennæ fulvæ, corpore fere triplo longiores; pedes robusti, femoribus posticis apices versus spinulosis, tibiis piceo unifasciatis; alæ abdomen longissime superantes; alæ posticæ diaphanæ.*

Male. Luteous. Head a little broader than the prothorax, with a small deep excavation on each side of the front. Antennæ tawny, nearly thrice the length of the body. Prothorax with furrows like those of the preceding species; fore border rounded; sides and hind border straight. Legs long, stout; hind femora with a few very minute spines on each side towards the tips; tibiæ with a piceous band in the middle; four anterior tibiæ with four long spines on each side; hind tibiæ with two rows of short black-tipped spines above. Wings extending for full half their length beyond the abdomen. Hind wings pellucid; veins pale. Length of the body 14 lines; expansion of the fore wings 42 lines.

This and the following species are distinguished from others by the long fore wings.

a. Ceylon. Presented by Dr. Templeton.

Gryllacris marginalis.

Mas. *Lutea; caput nigrum, macula frontali facieque luteis; antennæ fulvæ, basi luteæ; prothorax postice piceo unifasciatus; femora postica piceo unistrigata; alæ abdomen longissime superantes, venulis transversis piceis; alæ posticæ diaphanæ.*

Male. Luteous. Head black, as broad as the prothorax; an elliptical spot on the front, face, clypeus and palpi luteous. Antennæ tawny, luteous at the base. Prothorax with the usual furrows; a piceous band on the hind border, which, like the fore border, is slightly rounded; sides straight. Legs stout, rather short; hind femora with two rows of minute black-tipped spines beneath; a piceous streak above; four anterior tibiæ with four long spines on each side beneath; hind tibiæ with two rows of minute black-tipped spines above. Wings extending for nearly half their length beyond the abdomen; transverse sectors piceous. Hind wings pellucid. Length of the body 13 lines; expansion of the fore wings 42 lines.

a. Australia. Presented by the Haslar Hospital.

Gryllacris lepida.

Mas. *Pallide lutea, glabra; caput et prothorax cyanea; caput gutta facieque pallide luteis; antennæ fulvæ, basi nigricantes; prothorax rufescente biplagiatus; abdomen cyaneo late fasciatum.*

Male. Pale luteous, slender, smooth, shining, nearly linear. Head and prothorax metallic-blue. Head a little broader than the prothorax; a dot on the front and fore part pale luteous. Eyes tawny, elongate-elliptical. Antennæ tawny, blackish towards the base. Prothorax with a large reddish patch on each side in front; two oblique converging furrows on each side of the disk. Abdomen hardly longer than the prothorax;

third segment, except the base, fourth segment and fifth segment metallic-blue. Legs stout, rather short; four anterior tibiæ with four long stout spines on each side; hind femora and hind tibiæ with a row of very minute spines on each side beneath. Wings rudimentary. Length of the body 9 lines.

The specimen described appears not to be fully developed.

a. West Australia. From M. H. Du Boulay's collection.

Genus SIA.

Sia, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii. 114.

1. Sia ferox.

ferox, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.

Java.

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Genus DOLICHOCHAETA.

Dolichochaeta, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi. 233.

1. Dolichochaeta longicornis.

longicornis, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi.

Valdivia.

Page 191.

Stenopelmatus Mexicanus.

a—*b*. Mexico. From M. Brunner de Wattenwyl's collection.

This species and S. politus have the hind part of the head longer than that of S. erythromelas. S. politus is distinguished from S. Mexicanus and from S. erythromelas by the longer hind tibiæ.

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Lezina longipes.

Mas. *Testacea, longa, aptera, fere cylindrica; caput prothorace paullo latius; palpi longi, graciles, apice clavati; prothorax bifoveolatus; abdomen thorace paullo brevius; cerci fere filiformes, abdomini aquilongi; pedes graciles, longissimi, femoribus uniseriatim spinulosis, tibiis quatuor anterioribus biseriatim spinulosis, tibiis posticis biseriatim spinosis.*

Male. Testaceous, elongate, nearly cylindrical. Head a little broader than the prothorax. Palpi long, slender, clavate towards the tips. Antennæ slender. Prothorax with a large excavation on each side in the middle; fore border slightly rounded; sides and hind border straight. Mesothorax and metathorax well developed. Abdomen a little shorter than the thorax. Cerci slender, setulose, nearly filiform, as long as the abdomen. Legs slender, very long; femora with one row of minute spines beneath; hind femora incrassated towards the base; four anterior

tibiæ with a few minute spines in two rows beneath; hind tibiæ with two rows of slender black-tipped spines above. Length of the body 15—18 lines.

a, *b*. ——— ?

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RHAPHIDOPHORA GENICULATA.

geniculata, *Costa*, *Fauna del Regno di Napoli*—Hadenœcus?

Naples.

RHAPHIDOPHORA PALPATA.

Hadenœcus palpatus, p. 200.

a—*c*. Dalmatia. From M. Brunner de Wattenwyl's collection.

RHAPHIDOPHORA CAVICOLA.

Hadenœcus cavicolus, p. 200.

a, *b*. Carniolia. From M. Brunner de Wattenwyl's collection.

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HADENŒCUS SUBTERRANEUS.

The specimen here recorded is referred with doubt to this species.

a. West Coast of North America. Presented by Capt. Kellett and Lieut. Wood.

HADENŒCUS EDWARDSII.

Edwardsii, *Scudder*, *Proc. Bost. Soc. Nat. Hist.* xii. 408.

New Zealand.

HADENŒCUS PODUROIDES.

Fœm. *Cinereus, opacus, apterus, fere cylindricus, subtus testaceus; caput vittis duabus guttaque nigris; prothorax nigro sexvittatus; abdomen nigricante octovittatum; vagina testacea, lata, arcuata, abdomini aquilonga; pedes quatuor anteriores longi, graciles, nigricante fasciati.*

Female. Cinereous, dull, nearly cylindrical, testaceous beneath. Head short, not broader than the prothorax, with two black stripes on the vertex; a black dot on the front. Palpi moderately long; apical joint subclavate. Eyes slightly prominent. Antennæ long. Prothorax with six black stripes, the two outer pair interrupted. Abdomen a little longer than the thorax, with eight indistinct interrupted blackish stripes. Sheaths of the oviduct pale testaceous, broad, curved, as long as the abdomen. Four anterior legs long, slender, with irregular and interrupted blackish bands. Length of the body 5 lines.

The specimen described is deprived of the hind legs.

a. Australia. Presented by Dr. Sinclair.

CEUTHOPHILUS MACULATUS.

c, *d*. Massachusetts. Presented by F. Walker, Esq.

CEUTHOPHILUS LEPISMOIDES.

Mas. *Fulvus, nitens, antice angustior; abdomen thorace paullo longior; pedes sat graciles, femoribus posticis abdomine multo longioribus, tibiis anticis quinque spinosis, tibiis posticis spinulosis.*

Male. Tawny, convex, smooth, shining, decreasing in thickness from the head to the tip of the abdomen. Head short. Eyes piceous, not prominent. Palpi and antennæ slender. Prothorax short; fore border, sides and hind border slightly rounded. Abdomen a little longer than the thorax. Legs rather slender; femora unarmed; hind femora much longer than the abdomen; fore tibiæ with four long slender spines on the outside and with one on the inside; hind tibiæ with minute spines along each side. Length of the body 6 lines.

a. Australia. Presented by the Haslar Hospital.

Genus PHÆOPHILACRIS.

Mas. Corpus robustum. Caput breve, prothorace angustius; fastigium breve, subcarinatum; frons non carinata. Oculi parvi, elliptici, non prominuli. Palpi maxillares longissimi; articulus 2us 3o paullo longior; 4us 2o valde longior. Antennæ gracillimæ, corpore fere quadruplo longiores. Prothorax oblique bisulcatus, lateribus valde rotundatis. Cerci graciles, abdomine longiores. Pedes graciles, longissimi; femora antica biseriatim spinulosa; femora postica corpore longiora; tibiæ posticæ spinulosæ, spinis apicalibus longis. Alæ anticæ coriaceæ, abdomine breviores.

Male. Body stout. Head short, narrower than the prothorax; tip of the vertex short, forming a slight keel; front erect, not keeled. Eyes small, elliptical, not prominent. Maxillary palpi very long; fourth joint subclavate, very much longer than the second, which is a little longer than the third. Antennæ very slender, nearly four times the length of the body. Prothorax with an oblique furrow on each side; fore border and hind border straight; sides much rounded. Cerci slender, longer than the abdomen. Legs slender, very long; fore femora with two rows of minute spines beneath; hind femora incrassated towards the base, longer than the body; hind tibiæ a little longer than the hind femora, with two rows of minute spines above, and with a few long spines towards the tips. Fore wings coriaceous, shorter than the abdomen; veins strongly marked.

1. PHÆOPHILACRIS FUNESTA.

Mas. *Nigricans, subtus ferruginea.*

Male. Blackish, ferruginous beneath. Fore wings with about seven longitudinal veins, most of which are forked, and some of the forks have branches. Length of the body 14 lines.

a. Sierra Leone. From Mr. Salmon's collection.

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LIBANASA PALLITARSIS.

Mas. *Fulva, glabra, aptera, subtus testacea, postice sublatescens; caput macula subtriangulari fasciaque valde undulata nigris; prothorax nigricans, linea longitudinali plagisque duabus magnis ramosis testaceis; pedes testacei, graciles, femoribus posticis abdomine longioribus, tibiis piceo subnebulosis, tibiis quatuor anterioribus spinosis, tibiis posticis spinulosis.*

Male. Tawny, convex, smooth, shining, testaceous beneath, slightly decreasing in thickness from the head to the tip of the abdomen. Head short; a nearly triangular black spot on the tip of the vertex, connected with a very deeply undulating black band on the front. Eyes whitish, elongate, not prominent. Mandibles black. Antennæ pale. Prothorax blackish, with a testaceous longitudinal line, and on each side with a large testaceous patch, which emits some branches; fore border and sides slightly rounded; hind border notched in the middle. Abdomen shorter than the hind femora; apical appendages testaceous. Legs testaceous, slender; femora unarmed; tibiæ partly and slightly clouded with piceous; four anterior tibiæ with a few long slender spines on each side; hind tibiæ with very short spines on each side; tarsi whitish. Length of the body 7 lines.

a. New Zealand. Presented by the Rev. W. Colenso.

PART II.

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HETRODES MAURELII.

Eugaster Maurelii, *Lucas, A. S. E. F.* 4*me Ser.* ix. 85.

Senegal.

HETRODES LORICATUS.

Eugaster loricatus, *Gerst. Arch. Naturgesch.* xxxv. 213.

Zanzibar.

HETRODES EPHIPPIATUS.

Eugaster ephippiatus, *Gerst. Arch. Naturgesch.* xxxv. 213.

Zanzibar.

HETRODES TALPA.

Eugaster talpa, *Gerst. Arch. Naturgesch.* xxxv. 214.

Zanzibar.

Genus COSMODERUS.

Cosmoderus, *Lucas, A. S. E. F.* 4*me Ser.* viii. 325.

1. COSMODERUS ERINACEUS.

Hetrodes erinaceus, p. 230.

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Callimenus dasypus.

a. Hungary. From M. Brunner de Wattenwyl's collection.
b. Servia. From M. Brunner de Wattenwyl's collection.

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Onconotus Servillei.

a, *b*. Hungary. From M. Brunner de Wattenwyl's collection.

Genus CALLIMENELLUS.

Mas. et fœm. Corpus convexum, fere fusiforme. Caput parvum, prothorace angustius; fastigium porrectum, lanceolatum, sulcatum, obtusum; frons obliqua. Oculi parvi, rotundi, valde prominuli. Palpi maxillares sat longi; articulus 4us clavatus, 2o longior, 3o duplo longior. Antennæ graciles, corpore longiores. Abdomen subcarinatum. Cerci breves, validi. Pedes longiusculi; femora quatuor posteriora subtus subdentata; tibiæ subtus uniseriatim spinulosæ; tarsi brevissimi. Alæ brevissimæ. *Mas.*—Styli lanceolati, cercis paullo longiores. *Fœm.*—Vagina arcuata, abdominis dimidio brevior.

Male and female. Body arched, nearly fusiform. Head small, narrower than the prothorax; tip of the vertex forming a furrowed obtuse porrect spine; front obliquely retracted. Eyes small, round, very prominent. Palpi moderately long; fourth joint clavate, rather longer than the second, and about twice the length of the third. Antennæ slender, setaceous, longer than the body. Prothorax with two well-defined transverse furrows, the second one curved hindward; sides and hind border nearly straight; fore border rounded. Mesothorax and metathorax with a deep transverse furrow. Abdomen with a very slight longitudinal keel. Cerci short, stout. Legs rather long, moderately stout; four posterior femora very slightly dentate beneath; tibiæ with a few minute spines in a row beneath; tarsi very short. Wings incomplete. *Male.*—Styles lanceolate, a little longer than the cerci. *Female.*—Sheath of the oviduct deep, lanceolate, curved, less than half the length of the abdomen.

Very distinct from Callimenus, which it most resembles.

1. Callimenellus fumidus.

Mas. et fœm. *Ferrugineus aut piceus, vix scaber, subtus fulvus aut testaceus; antennæ nigricantes, nonnunquam albo unifasciatæ; pedes testacei, femoribus apice nigricantibus.* Var. β.—*Pedes picei.*

Male and female. Ferruginous or piceous, very slightly scabrous, tawny or testaceous beneath. Antennæ blackish, occasionally with a white band. Legs testaceous; femora blackish towards the tips. *Var.* β.—Legs piceous. Length of the body 13—18 lines.

a. China. Presented by G. T. Lay, Esq.
b, *c*. ———?

Genus ARACHNACRIS.

Arachnacris, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.

1. Arachnacris tenuipes.

tenuipes, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.

Java.

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Barbitistes ruficosta.

ruficosta, *Fieber, MS.*

a. Tergestum. From M. Brunner de Wattenwyl's collection.
b, c. Dalmatia.

Barbitistes albovittata.

Odontura albovittata, p. 241.

a—d. Austria. From M. Brunner de Wattenwyl's collection.

Barbitistes Bosci.

Bosci, *Fieber, MS.*

a—d. Carinthia. From M. Brunner de Wattenwyl's collection.

Barbitistes discoidalis.

discoidalis, *Fieber, MS.*

a, b. South Hungary. From M. Brunner de Wattenwyl's collection.

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Ephippiger limbatus.

a—d. Istria. From M. Brunner de Wattenwyl's collection.

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Ephippiger dorsalis??

a, b. Greece. From M. Brunner de Wattenwyl's collection.
c. Asia Minor. From M. Brunner de Wattenwyl's collection.

Ephippiger Idomenæi.

a. Andalusia. From M. Brunner de Wattenwyl's collection.

Ephippiger provincialis.

a. South France. From M. Brunner de Wattenwyl's collection.

Ephippiger Dalmaticus.

Dalmaticus, *Brisout, MS.*

Dalmatia.

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ODONTURA SUPERBA.

a—d. Dalmatia. From M. Brunner de Wattenwyl's collection.

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ODONTURA FISCHERI.

a—d. Dalmatia. From M. Brunner de Wattenwyl's collection.

ODONTURA ŒSKAYI.

a. Fiume. From M. Brunner de Wattenwyl's collection.

ODONTURA ALBOVITTATA.

a—c. Vienna. From M. Brunner de Wattenwyl's collection.

ODONTURA AFFINIS.

affinis, *Frivaldszky, Mon. Orth. Hungariæ Hung. Akad.* 1867, 91, pl. 2, f. 1—*Horvath, Berl. Ent. Zeit.* xiv. (1870) 42.

Hungary.

ODONTURA BRUNNERI.

Brunneri, *Friv. Mon. Orth. Hung.* 94, pl. 2, f. 3—*Horv. Berl. Ent. Zeit.* xiv. 43.

Hungary.

ODONTURA MODESTA.

modesta, *Friv. Mon. Orth. Hung.* 96, pl. 3, f. 1—*Horv. Berl. Ent. Zeit.* xiv. 43.

a. Hungary. From M. Brunner de Wattenwyl's collection.

ODONTURA SPECIOSA.

speciosa, *Friv. Mon. Orth. Hung.* 98, pl. 3, f. 3—*Horv. Berl. Ent. Zeit.* xiv. 44.

a. South Hungary. From M. Brunner de Wattenwyl's collection.

ODONTURA LATICAUDA.

laticauda, *Friv. Mon. Orth. Hung.* 102, pl. 4, f. 1—*Horv. Berl. Ent. Zeit.* xiv. 45.

Hungary.

ODONTURA DISCOIDALIS.

discoidalis, *Friv. Mon. Orth. Hung.* 103, pl. 2, f. 1—*Horv. Berl. Ent. Zeit.* xiv. 45.

Hungary.

ODONTURA AMPLIPENNIS.

amplipennis, *Brunner*.

a. Asia Minor. From M. Brunner de Wattenwyl's collection.

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ODONTURA PUNCTINERVIS.

punctinervis, *Stal*, *Eug. Resa*, 318.

Buenos Ayres.

CYRTASPIS VARIOPICTA.

variopicta, *Costa*, *Ent. della Calabria Uteriore*.

Calabria.

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GAMPSOCLEIS GLABRA.

a, *b*. Vienna. From M. Brunner de Wattenwyl's collection.

GAMPSOCLEIS SPECTABILIS.

Ephippiger dorsalis? p. 237—Drymadusa spectabilis, p. 237—Gampsocleis spectabilis, *Watt. Disq. Orth.* ii. 4, pl. 9, f. 3.

GAMPSOCLEIS ABBREVIATA.

abbreviata, *Brunner*, *MS*.

a. Dalmatia. From M. Brunner de Wattenwyl's collection.

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PTEROLEPIS MODESTA.

a—*e*. Trieste. From M. Brunner de Wattenwyl's collection.

PTEROLEPIS ALPINA.

a, *b*. Switzerland. From M. Brunner de Wattenwyl's collection.

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Genus METHOLCE.

Fœm. Corpus robustum, lævе, nitens. Caput breve; fastigium planum, porrectum, conicum; frons erecta. Oculi fere rotundi, valde prominuli. Antennæ graciles. Prothorax planus, postice productus et latescens abdomen basi superans, carinis lateralibus bene determinatis, margine antico recto, lateribus margineque postico rotundatis. Vagina subarcuata, corpori æquilonga. Femora postica subtus spinulosa, corpori æquilonga.

Female. Body stout, smooth, shining. Head short, as broad as the fore border of the prothorax; tip of the vertex flat, porrect, conical; front erect. Eyes nearly round, very prominent. Palpi moderately long. Antennæ slender. Prothorax flat above, widening and elongated hindward, where it forms a membrane, which extends over the basal part of the abdomen; a very slight dorsal keel, and two very slight transverse impressed lines, the hind one angular; lateral keels well defined; fore border straight; sides and hind border rounded. Sheath of the oviduct deep, slightly curved, as long as the body. Legs moderately stout; hind femora as long as the body, with two rows of a few minute spines beneath; hind tibiæ a little shorter than the hind femora, with very minute spines.

Most nearly allied to Thyreonotus.

1. METHOLCE NIGRITARSIS.

Fœm. *Pallide testacea, glabra; prothorax nigro bistrigatus et sex-guttatus; femora subtus fusco unistrigata; tibiæ posticæ supra fuscæ; tarsi nigri.*

Female. Pale testaceous, very smooth and shining. Eyes tawny. Prothorax with a black dot on each side of the disk, and with a longitudinal black streak and two black dots on each side. Sheath of the oviduct with a black line above. Femora with a brown streak beneath; fore tibiæ brown above at the base; hind tibiæ brown above; tarsi black. Length of the body 5 lines.

a. Moreton Bay. Presented by — Gibbons, Esq.

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ORPHANIA DENTICAUDA.

a—c. Vienna. From M. Brunner de Wattenwyl's collection.
d. Hungary. From M. Brunner de Wattenwyl's collection.

ORPHANIA FIEBERI.

Fieberi, *Schmidt.*

a. Carniolia. From M. Brunner de Wattenwyl's collection.

ORPHANIA AFFINIS.

Decticus affinis, p. 257.

a—c. South Hungary. From M. Brunner de Wattenwyl's collection.

ORPHANIA SANCTI PAULI.

Sancti Pauli, *Brunner, MS.*

a, b. Ephesus. From M. Brunner de Wattenwyl's collection.

ORPHANIA HAMATA.

hamata, *Brunner, MS.*

a, b. Rhodes. From M. Brunner de Wattenwyl's collection.

Orphania Bosphorica.

Bosphorica, *Brunner*, *MS.*

a, *b*. Constantinople. From M. Brunner de Wattenwyl's collection.

Orphania Brunneri.

Brunneri, *Fieber*, *MS.*

a, *b*. Greece. From M. Brunner de Wattenwyl's collection.

Orphania elegans.

Ephippiger elegans, p. 236.

a—*c*. Dalmatia. From M. Brunner de Wattenwyl's collection.

Orphania thoracica.

thoracica, *Fieber*.

a—*c*. South Hungary. From M. Brunner de Wattenwyl's collection.

Orphania rustica.

rustica, *Brunner*.

a—*c*. South Hungary. From M. Brunner de Wattenwyl's collection.

The following Synopsis of the Species of Thamnotrizon is translated from M. Brunner de Wattenwyl's *Disq. Orth.* ii. 8:—

A. Fore wings of the male covered for the most part by the prothorax; their prominent part not equal to one-third of the length of the prothorax. Fore wings of the female wholly covered by the prothorax.

a. Oviduct curved.

* Body green. - - - - - - Chabrieri.

** Body brown.

† Species of small size.

‡ Fore legs of the usual structure. - - - fallax.

‡‡ Fore legs stouter than usual. - - - pustulipes.

†† Species of larger size. - - - - femoratus.

b. Oviduct straight.

* Front pale, of one colour. - - - - littoralis.

** Front dotted.

† Oviduct very long. - - - - - signatus.

†† Oviduct short, broad. - - - - punctifrons.

B. Prominent part of the fore wings equal to, or larger than, the prothorax in the male, conspicuous in the female.

a. Oviduct straight or slightly curved.

* Cerci of the male dentate at the base on the inner side.

† Vertex broad. Prothorax flat above.

‡ Deflexed lobes of the prothorax with a yellow hind border.
§ Oviduct quite straight. - - - - transilvanicus.
§§ Oviduct slightly curved. - - - - apterus.
‡‡ Deflexed lobes of the prothorax with a yellow hind border and a yellow lower border. - - similis.
†† Vertex narrow. Prothorax convex above. - - difformis.
** Cerci of the male not dentate at the base on the inner side.
† Oviduct quite straight. Hind femora streaked. - striolatus.
† Oviduct slightly curved. Hind femora of one colour. gracilis.
b. Oviduct much curved.
* Deflexed lobes of the prothorax brown; hind border and lower border yellow. - - - - Austriacus.
** Deflexed lobes of the prothorax brown, not bordered with yellow. - - - - - cinereus.

THAMNOTRIZON APTERUS.

a—c. Hungary. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON CHABRIERI.

a—f. Dalmatia. From M. Brunner de Wattenwyl's collection.

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THAMNOTRIZON TRANSYLVANICUS.

a—d. Hungary. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON FALLAX.

a, b. Corfu. From M. Brunner de Wattenwyl's collection.

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THAMNOTRIZON STRIOLATUS.

a—d. Trieste. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON AUSTRIACUS.

Austriacus, *Turk. Wien. Ent. Mon.* iv. 85.

a—c. Vienna. From M. Brunner de Wattenwyl's collection.
d, e. South Hungary. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON SIMILIS.

a—c. Hungary. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON GRACILIS.

a—d. South Hungary. From M. Brunner de Wattenwyl's collection.

THHAMNOTRIZON LEDERERI.

a, *b*. Smyrna. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON FEMORATUS.

femoralis, p. 253—fallax? p. 252.

THAMNOTRIZON LITTORALIS.

Pterolepis littoralis, *Fieb. Lotos*, iii. 163—Thamnotrizon littoralis, *Watt. Disq. Orth.* ii. 11.

Dalmatia. Greece.

a. Tergestum. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON PUNCTIFRONS.

Decticus punctifrons, p. 256—Pterolepis Ehrenbergii, *Fieb. Lotos*, iii. 154.

Mount Parnassus. Egypt.

THAMNOTRIZON LEDERERI.

Ledereri, *Fieb. Wien. Ent. Mon.* v. 196.

Beyrout.

THAMNOTRIZON SCHMIDTII.

Schmidtii, *Fieb. Wien. Ent. Mon.* v. 197.

Trieste. Corfu.

THAMNOTRIZON DORSALIS.

dorsalis, *Fieb. Wien. Ent. Mon.* v. 198.

European Turkey.

THAMNOTRIZON ERBERI.

Erberi, *Brunner*, *MS.*

a. Epirus. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON SMYRNENSIS.

Smyrnensis, *Brunner*, *MS.*

a, *b*. Ephesus. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON DALMATICUS.

Dalmaticus, *Brunner*, *MS.*

a—*c*. Dalmatia. From M. Brunner de Wattenwyl's collection.
d. *var*. Montenegro. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON FRIVALDSKYI.

Frivaldskyi, *Herman*, *MS.*

a. Transylvania. From M. Brunner de Wattenwyl's collection.

THAMNOTRIZON FRATER.

frater, *Brunner*, *MS.*

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

Genus RHACOCLEIS.

Rhacocleis, *Fieb.*

RHACOCLEIS DISCREPANS.

discrepans, *Fieb. Lotos*, iii. 148. *Watt. Disq. Orth.* ii. 18—Rhamnotrizon pallidus, *Watt. Verh. Zool. Bot. Wien.* xi. 99—Pterolepis modesta? p. 244.

East Europe.

a—d. Tergestum. From M. Brunner de Wattenwyl's collection.

RHACOCLEIS DORSATA.

Thamnotrizon dorsatus, *Watt. Verh. Zool. Bot. Ges. Wien.* xi. 100—Rhacocleis dorsata, *Watt. Disq. Orth.* ii. 19, pl. 13, f. 19—Pterolepis Raimondii? p. 244.

Dalmatia.

a—c. Tergestum. From M. Brunner de Wattenwyl's collection.

RHACOCLEIS BUCCHICHI.

Bucchichi, *Brunner*, *MS.*

a. Dalmatia. From M. Brunner de Wattenwyl's collection.

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DECTICUS MONTANUS.

a. Vienna. From M. Brunner de Wattenwyl's collection.

DECTICUS BICOLOR.

a—d. Vienna. From M. Brunner de Wattenwyl's collection.

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DECTICUS VITTATUS.

a, *b*. Vienna. From M. Brunner de Wattenwyl's collection.
c. Dalmatia. From M. Brunner de Wattenwyl's collection.

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Decticus sepium.

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

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Decticus intermedius.

a—d. Dalmatia. From M. Brunner de Wattenwyl's collection.
e. Ephesus. From M. Brunner de Wattenwyl's collection.

Decticus alpinus.

alpinus, *Kollar.*

a. Swiss Alps. From M. Brunner de Wattenwyl's collection.

Decticus modestus.

modestus, *Fieber, MSS.*

a, b. Dalmatia. From M. Brunner de Wattenwyl's collection.

Psorodontus alpinus.

Pterolepis alpina, p. 244.

a. Swiss Alps. From M. Brunner de Wattenwyl's collection.

Psorodontus Pancici.

Pterolepis venosa? *Fisch. de W. Nouv. Mém. Soc. Imp. Nat. Mosc.* viii. 212, pl. 20, f. 3, 4—Pterolepis Fieberi? *Frizdwaldsky*, (?) *Fieb. Lotos*, iii. 154—Psorodontus Pancici, *Watt. Disq. Orth.* ii. 7, pl. 10, f. 5—Decticus Pancici, p. 257.

a—c. Servia. From M. Brunner de Wattenwyl's collection.

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Natricia lutea.

Fœm. *Lutea, opaca; caput breve, fastigio parvo lanceolato, fronte nitente; vagina arcuata, abdomine paullo longior; alæ brevissimæ.*

Female. Luteous, dull. Head short, a little narrower than the prothorax; tip of the vertex small, lanceolate; front shining, erect, convex. Eyes ferruginous, small, round, prominent. Antennæ slender. Prothorax a little narrower in front, with two slight transverse impressed lines, the hinder line deeply curved hindward; fore border, sides and hind border nearly straight. Sheath of the oviduct deep curved, a little longer than the abdomen. Legs long, slender. Wings rudimentary. Length of the body 10 lines.

The longer oviduct distinguishes it from N. ochracea.

a. Australia. Presented by the Entomological Club.

Page 270.

Xiphidium hastatum.

Locusta hastata, *Charp. Hor. Ent.* 113—Xiphidium hastatum, *Fieber, Lotos*, iii. 170; iv. 223. *Watt. Disq. Orth.* ii. 3.

Hungary. Servia.

a, *b*. Bulgaria. From M. Brunner de Wattenwyl's collection.

Xiphidium brevipennis.

a, *b*. Massachusetts. From M. Brunner de Wattenwyl's collection.

Xiphidium attenuatum.

attenuatum, *Scudder, Trans. Amer. Ent. Soc.* ii. 305.

Illinois.

Xiphidium hecticum.

hecticum. *Gerst. Arch. Naturgesch.* xxxv. 214.

Zanzibar.

Page 274.

Xiphidium Sinense.

Mas. *Pallide testaceum, vitta fusca antice attenuata; prothorax subpunctatus; alæ posticæ diaphanæ, costa apice testaceo strigata.*

Male. Pale testaceous, smooth, shining. Head and prothorax with a broad brown stripe, which tapers from the hind border of the prothorax to the tip of the vertex. Eyes brown, nearly round, rather large and prominent. Disk of the prothorax thinly and very minutely punctured. Hind femora rather shorter than the body; hind tibiæ as long as the hind femora, with very minute spines. Fore wings longer than the body. Hind wings pellucid, very little longer than the fore wings; costa with a pale testaceous apical streak. Length of the body 7 lines; expansion of the fore wings 17 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.
b. China. Presented by G. T. Lay, Esq.

Page 279.

Meconema meridionalis.

meridionale, *Costa, Fauna del Regno di Napoli.*

Naples.

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Locusta caudata.

a—*c*. Vienna. From M. Brunner de Wattenwyl's collection.

LOCUSTA UNICOLOR.

a. Philippine Isles. From M. Brunner de Wattenwyl's collection.

LOCUSTA? STRAMINULA.

Fœm. *Pallide straminea, gracillima; fastigium brevissimum; prothorax planus, postice latescens; vagina fere recta, abdomine longior; tibiæ quatuor anteriores biseriatim quadrispinosæ; tibiæ posticæ spinulosæ; alæ posticæ diaphanæ.*

Female. Pale straw-colour, smooth, very slender. Head short; tip of the vertex very small, not prominent; front erect. Eyes ferruginous, round, prominent. Antennæ very slender. Prothorax widening hindward, flat above; transverse impressed lines very slight; sides and hind border much rounded. Sheath of the oviduct nearly straight, rather longer than the abdomen. Legs slender; four anterior tibiæ with four very slender spines on each side; hind tibiæ as long as the hind femora, their spines very minute. Hind wings pellucid, longer than the fore wings; veins whitish. Length of the body, including the oviduct, 10 lines; expansion of the fore wings 18 lines.

a. Bombay. Presented by Dr. Leith.

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SAGA SYNOPHRYS.

a, *b*. Dalmatia. From M. Brunner de Wattenwyl's collection.

SAGA EPIHIPPIGERA.

a, *b*. Caucasus. From M. Brunner de Wattenwyl's collection.

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SAGA QUADRISIGNATA.

quadrisignata, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

SAGA SYRIACA.

Syriaca, *Lucas*, *A. S. E. F.* 4*me Ser.* iv. *Bull.* v.
Aleppo.

Page 300.

AGRŒCIA OBSCURA.

obscura, *Giebel*, *Zeitschr. Gesammt. Naturwiss.* xviii.
Java.

Page 301.

Genus DISCERATUS.

Disceratus, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 335.

DISCERATUS NUBIGER.

nubiger, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 335.

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CONOCEPHALUS MANDIBULARIS.

a, *b*. Trieste. From M. Brunner de Wattenwyl's collection.

CONOCEPHALUS ROBUSTUS.

a, *b*. Massachusetts. From M. Brunner de Wattenwyl's collection.

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CONOCEPHALUS BREVICAUDA.

brevicauda, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 333.

CONOCEPHALUS TENUICAUDA.

tenuicauda, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 333.

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CONOCEPHALUS DIFFERENS.

a. Philippine Isles. From M. Brunner de Wattenwyl's collection.

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CONOCEPHALUS BREVICEPS.

Mas. *Stramineus, gracilis; caput antice conicum, fronte obliqua; prothorax antice angustior, lateribus margineque postico rotundatis; alæ anticæ pallide virides, corpore multo longiores; alæ posticæ diaphanæ.*

Male. Straw-colour, slender. Head in front of the eyes conical, not longer than the breadth between the eyes; front oblique. Eyes blackish, round, not prominent. Antennæ longer than the body. Prothorax above flat, narrower in front; two indistinct transverse impressed lines; fore border nearly straight; sides and hind border rounded. Legs slender; hind femora rather shorter than the body; hind tibiæ as long as the hind femora, their spines very minute. Wings much longer than the body. Fore wings pale green. Hind wings pellucid. Length of the body 12 lines; expansion of the fore wings 32 lines.

The fastigium is a little shorter than that of C. vicinus.

a. ——— ?

Page 331.

PSEUDORHYNCHUS AFRICANUS.

Fœm. *Pallide virescens; caput antice porrectum, lanceolatum, fronte nigra scabra obliqua, facie clypeoque pallide flavis; vagina arcuata, abdomine vix brevior; alæ anticæ corpore multo longiores; alæ posticæ diaphanæ.*

Female. Pale greenish. Head and prothorax very minutely scabrous. Head in front of the eyes porrect, lanceolate, as long as the breadth of the space between the eyes, black beneath; front black, scabrous, oblique; face and clypeus pale yellow. Mandibles black. Eyes tawny, nearly round, hardly prominent. Antennæ longer than the body. Prothorax above flat, narrower in front; two slight transverse impressed lines; fore border, sides and hind border nearly straight. Sheath of the oviduct curved, deep, nearly as long as the abdomen. Legs stout; femora and four anterior tibiæ with a row of short spines beneath; hind femora shorter than the body; hind tibiæ as long as the hind femora, with minute spines. Wings much longer than the body. Hind wings pellucid. Length of the body 15 lines; expansion of the fore wings 38 lines.

a. W. Africa. Presented by A. Swanzy, Esq. "Lived eighteen months without food."

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COPIOPHORA GRACILIS.

gracilis, *Scudder*, *Bost. Soc. Nat. Hist.* xii.

Page 334.

Genus ACRIDOXENA.

Acridoxena, *White*, *Proc. Roy. Phys. Soc. Edinb.* 1865, 309.

1. ACRIDOXENA HEWANIANA.

Hewaniana, *Smith*, *Proc. Roy. Phys. Soc. Edinb.* 1865, 310, 311.

a. Old Calabar. Presented by Dr. J. A. Smith.

Genus ACANTHACARA.

Acanthacara, *Scudder*, *Bost. Soc. Nat. Hist.* xii.

ACANTHACARA ACUTA.

acuta, *Scudder*, *Bost. Soc. Nat. Hist.* xii.

PHANEROPTERA DALMATINA.

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

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PHANEROPTERA SUBNOTATA.

a—b. Philippine Isles. From M. Brunner de Wattenwyl's collection.

PHANEROPTERA SYRIACA.

Syriaca, *Brunner*, *MS.*

a, *b*. Asia Minor. From M. Brunner de Wattenwyl's collection.

PHANEROPTERA NANA.

nana, *Charp.*

a, *b*. South France. From M. Brunner de Wattenwyl's collection.
c, *d*. Dalmatia. From M. Brunner de Wattenwyl's collection.

PHANEROPTERA PUNCTIPENNIS.

punctipennis, *Gerst. Arch. Naturg.* XXXV. 215.

Zanzibar.

PHANEROPTERA TETRASTICTA.

tetrasticta, *Gerst. Arch. Naturg.* XXXV. 215.

Zanzibar.

PHANEROPTERA NIGROSPARSA.

Mas. *Viridis; antennæ nigro annulatæ, corpore longiores; prothorax et pedes nigro confertim punctati; sexualia magna; pedes gracillimi, spinis tibiarum posticarum nigris minimis; alæ diaphanæ.*

Male. Grass-green. Head very short, with a short projecting round point on the tip of the vertex; front erect. Eyes ferruginous, nearly round. Antennæ longer than the body, with numerous black rings. Prothorax and legs with numerous black points. Prothorax with two transverse impressed lines, a little narrower in front, abruptly declining on each side; sides and hind border much rounded. Abdomen much shorter than the hind femora; apical appendages large. Legs very slender; hind tibiæ as long as the hind femora, with black very minute spines. Wings pellucid, very minutely reticulated; veins green. Hind wings much longer than the fore wings. Length of the body 8½ lines; expansion of the fore wings 22 lines.

a. Bombay. Presented by Dr. Leith.

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PHANEROPTERA JUNCEA.

Fœm. *Viridescente testacea, gracillima; vagina valde arcuata, abdominis dimidio æquilonga; pedes gracillimi, femoribus posticis corpore longioribus; alæ anticæ corpore multo longiores; alæ posticæ diaphanæ.*

Female. Greenish testaceous, very slender. Head very short; vertex very narrow between the sockets of the antennæ; front erect. Eyes brownish, round, slightly prominent. Antennæ much longer than the body. Prothorax flat above; fore border and sides nearly straight; hind border much rounded. Sheath of the oviduct deep, much curved, about half the length of the abdomen. Legs very slender; hind femora longer than the body; hind tibiæ as long as the hind femora, with very minute spines. Fore wings much longer than the body. Hind wings pellucid, green along

he apical part of the costa, much longer than the fore wings. Length of the body 7 lines; expansion of the fore wings 20 lines.

More slender than P. vicaria, which it much resembles.

Australia. In the National Museum at Melbourne.

PHANEROPTERA PUNCTIFERA.

Mas. *Testacea, gracilis; fastigium marginatum; antennæ nigro annulatæ; prothorax nigro punctatus; sexualia maxima; alæ anticæ pallide virides, corpore longiores, linea postica nigra interrupta; alæ posticæ diaphanæ.*

Male. Testaceous, slender. Head very short; tip of the vertex with two converging united keels; front erect. Antennæ very much longer than the body, with numerous black rings. Prothorax with many black points and with two transverse impressed lines, of which the hinder one is much curved hindward; hind border truncated and slightly elevated. Sexualia very large. Legs very slender; hind femora as long as the body, with a few minute spines beneath; hind tibiæ with minute spines, as long as the hind femora. Fore wings pale green, longer than the body; a black line along the hind border, interrupted by pale veins. Hind wings pellucid, a little longer than the fore wings, green along the apical part of the costa. Length of the body 8 lines; expansion of the fore wings 25 lines.

a. Australia.

PHANEROPTERA CORNUTA.

Mas. *Pallide straminea, gracillima; fastigium e spina porrecta sulcata; prothorax nigro quadrilineatus, albo bivittatus; alæ diaphanæ, longissimæ.*

Male. Pale straw-colour, very slender. Tip of the vertex forming a porrect furrowed spine; front oblique. Eyes tawny, round, prominent. Prothorax with four black lines; inner lines complete; outer lines short, extending along the hind part of the inner sides of two white marginal stripes; fore border and sides straight; hind border much rounded. Legs long, very slender; hind femora very much longer than the body; tibiæ with very minute spines; hind tibiæ as long as the hind femora. Wings pellucid; veins pale. Fore wings nearly twice the length of the body. Hind wings much longer than the fore wings. Length of the body 8 lines; expansion of the fore wings 30 lines.

Australia. In the National Museum at Melbourne.

Page 357.

Genus MACKIA.

Mackia, *White, Mus. Nat. Hist.* ii. 244—Tricala, p. 357.

1. MACKIA HYSTRIX.

Tricala hystrix, p. 357.

Phaneroptera hystrix, *Westw.*, is a different species, and represents a new genus.

Genus AGANACRIS.

Fœm. Corpus gracile. Caput breve, convexum; fastigium bicarinatum; frons erecta, non carinata. Oculi prominuli. Prothorax brevis, postice latescens et bicarinatus; margo posticus rotundatus. Vagina valde arcuata, abdominis dimidio longior. Pedes gracillimi; femora postica abdomine longiora, subtus uniseriatim spinulosa, basi incrassata; tibiæ posticæ longiores, biseriatim spinulosæ. Alæ anticæ corpore paullo longiores. Alæ posticæ adhuc longiores.

Female. Body slender. Head short; vertex convex; tip with two well-defined approximate keels, which are continued between the sockets of the antennæ; front erect, without keels. Eyes elliptical, prominent. Prothorax short; disk widening hindward, with a short keel on each side near the hind border, which is rounded. Sheath of the oviduct much curved, more than half the length of the abdomen. Legs very slender; hind femora longer than the abdomen, incrassated near the base, with a row of minute spines beneath; hind tibiæ rather longer than the hind femora, with two rows of minute spines. Fore wings a little longer than the body, moderately broad. Hind wings ample, extending beyond the fore wings.

1. Aganacris micans.

Fœm. *Nigra, glabra; facies testacea; femora postica albo bifasciata; alæ anticæ subcupreo nigræ.*

Female. Black, smooth, shining. Face testaceous. Eyes tawny. Hind femora with two irregular white bands on the outer side before the middle. Fore wings shining, with a slight cupreous tinge. Hind wings blackish. Length of the body 10 lines; expansion of the hind wings 28 lines.

St. Paul, Amazon Region. From Mr. Bates' collection.

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Valna nigropicta.

Fœm. *Albida; caput punctis fascia vittisque duabus nigris; antennæ nigro annulatæ; prothorax lineis duabus angulatis nigris; vagina recta, abdominis dimidio æquilonga; pedes nigro notati, femoribus quatuor posterioribus spinis arcuatis armatis; alæ brevissimæ.*

Female. Whitish, rather stout. Head with a few black points on the vertex, with a black band between the eyes and with a black stripe between each eye and the hind border; tip of the vertex porrect, furrowed, conical. Eyes tawny, round, very prominent. Antennæ with black rings. Prothorax somewhat saddle-shaped, with two transverse impressed lines and with two black angular longitudinal lines, which widen towards the hind border; two slight transverse ridges near the hind border terminating in knobs; fore border arched; sides and hind border nearly straight. Sheath of the oviduct straight, about half the length of the abdomen. Legs irregularly marked with black; four posterior femora armed beneath

with a row of stout curved spines; hind femora rather shorter than the body; knees with a stout spine; hind tibiæ a little shorter than the hind femora, with two rows of stout spines above and with two rows of minute spines beneath. Wings rudimentary. Length of the body 13 lines.

Much stouter than V. melalenca.

a. Para. From Mr. Bates' collection.

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Microcentrum vividum.

Fœm. *Saturate viride, subtus testaceum; fastigium obtusum, sulcatum, subtus fuscum; antennæ fuscæ; prothoracis margo posticus rufo-fuscus; oviductus arcuatus, abdominis dimidio brevior; alæ anticæ corpore plus duplo longiores, costa subrotundata, margine postico sub-angulato; alæ posticæ diaphanæ, apice virides.*

Female. Grass-green. Head and under side mostly testaceous. Head short, narrower than the prothorax; tip of the vertex obtuse, longitudinally furrowed; front slightly oblique, emitting a short spine to the brown part of the tip. Eyes brown, round, prominent. Antennæ brown. Prothorax narrower in front; disk flat, with a very slight longitudinal impressed line and a few very slight transverse impressed lines, these excepting one are angular; a dark reddish brown band on the hind border; lateral keels sharply defined; sides much rounded. Oviduct curved, less than half the length of the abdomen. Hind tibiæ with three keels, which are armed with very short spines. Fore wings a little more than twice the length of the body; hind border forming an extremely obtuse angle at a little before one-third of the length from the base; costa slightly rounded. Hind wings pellucid, green about the tips, extending rather beyond the fore wings. Length of the body 14 lines; expansion of the fore wings 60 lines.

The broad black hind border of the prothorax distinguishes it from the other species of the genus.

a. Orizaba. From M. Sallé's collection.

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Phylloptera lanceolata.

a, *b*. Brazil. From M. Brunner de Wattenwyl's collection.

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Phylloptera Forstenii.

a, *b*. Java. From M. Brunner de Wattenwyl's collection.

Phylloptera intacta.

Mas. *Testacea, fusco bivittata; fastigium breve, sulcatum, truncatum; alæ anticæ corpore duplo longiores, areolis inordinatim dispositis; alæ posticæ diaphanæ, apice testaceæ.*

Male. Testaceous. Head and prothorax with two brown stripes, which extend from the hind side of the eyes and occupy the lateral keels of the prothorax. Tip of the vertex short, truncate, furrowed. Eyes elliptical, prominent. Disk of the prothorax flat, widening hindward; lateral keels sharply defined; fore border excavated; hind border slightly rounded. Legs slender; hind femora longer than the body, with a few very minute spines on each side beneath; hind tibiæ as long as the hind femora, with very minute spines. Fore wings twice the length of the body; reticulation and areolets irregular; costa very slightly rounded; interior border much rounded. Hind wings pellucid, testaceous towards the tips, extending somewhat beyond the fore wings. Length of the body 9 lines; expansion of the fore wings 36 lines.

Very nearly allied to P. subnotata, but the prothorax has no brown stripes and the fore wings have no spots.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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OROPHUS ROTUNDIFOLIA.

a. Massachusetts. Presented by F. Walker, Esq.

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COSMOPHYLLUM OLIVACUM.

a—e. Chili. From M. Brunner de Wattenwyl's collection.

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STEIRODON QUADRATUM.

quadratum, *Scudder, Bost. Soc. Nat. Hist.* xii.

Guayaquil.

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PSEUDOPHYLLUS JUNGHUHNI.

Junghuhni, *Giebel, Zeitschr. Gesammt. Naturwiss.* xviii.

Java.

PSEUDOPHYLLUS VITTIFER.

Fœm. *Testaceus; caput et prothorax fusco univittata; prothorax subcarinatus, margine postico subproducto non angulato; vagina vix arcuata, apice nigricans, abdomini aquilonga; alæ anticæ cinereæ, corpore multo longiores; alæ posticæ diaphanæ.*

Female. Testaceous. Head and prothorax with a brown stripe. Head narrower than the prothorax; a slight keel on the vertex; front oblique. Eyes nearly round, slightly prominent. Prothorax narrower in front, with a slight keel and with three transverse impressed lines; fore border rounded; hind border slightly elongated, not angular. Sheath of the oviduct deep, hardly curved, blackish at the tip, as long as the abdomen. Legs with the usual very minute spines. Fore wings cinereous, much

longer than the body; costa slightly rounded. Hind wings pellucid, nearly as long as the fore wings. Length of the body 14 lines; expansion of the hind wings 48 lines.

a. Sierra Leone. From Mr. Salmon's collection.

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PSEUDOPHYLLUS NIGROSTRIGATUS.

Fœm. *Testaceus, caput subscabrum, fastigio truncato inciso; oculi rufescentes, subpetiolati, valde prominuli, basi testacei; prothoracis margines laterales nigris strigati; oviductus valde aculeatus, abdomine triplo brevior; tibiæ posticæ triseriatim spinosæ; alæ anticæ abdomine plus duplo longiores, areolis paucis maximis.*

Female. Testaceous. Head short, slightly scabrous, a little narrower than the fore border of the prothorax; an elevated transverse ridge between the eyes, notched in the middle; front erect. Eyes very prominent, slightly petiolated, reddish, except towards the base. Antennæ very slender, about twice the length of the body. Prothorax scabrous, flat above, with three well-defined transverse impressed lines; fore border slightly rounded; hind border much rounded; sides very slightly concave, accompanied by a black stripe, which widens hindward. Prosternum with two long slender lanceolate diverging spines. Oviduct much curved, about one-third of the length of the abdomen. Hind femora as long as the abdomen, with five minute black-tipped spines on each side beneath; hind tibiæ as long as the hind femora, with minute black-tipped spines along each of the three keels; four anterior femora and tibiæ with a few very minute spines. Wings a little more than twice the length of the abdomen. Fore wings with extremely small areolets, and with a few very large primary areolets, of which one in the disk is heptagonal, most of the others extend to the hind border or to the subcostal vein; space between the subcostal vein and the costa with irregular ramifying veins. Hind wings pellucid, with pale testaceous veins. Length of the body 16 lines; expansion of the fore wings 48 lines.

a. Vavou, Pacific Ocean. Presented by J. Brenchley, Esq.

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APRION CURVIFERUM.

Fœm. *Pallide testaceum, gracile; caput parvum, fastigio porrecto lanceolato sulcato; prothorax unicarinatus, subtuberculatus, margine postico producto vix angulato; vagina subarcuata, apice picea, abdomine paullo longior; alæ anticæ corpore valde longiores, costa rotundata; alæ posticæ diaphanæ.*

Female. Pale testaceous, slender. Head narrower than the prothorax; tip of the vertex forming a porrect furrowed spine; front very oblique. Eyes brown, round, prominent. Prothorax very minutely tuberculated, with a distinct keel, and with three well-defined transverse impressed lines, of which the hind one is interrupted; fore border arched; hind border elongated, hardly angular. Sheath of the oviduct slightly curved, piceous at the tip, a little longer than the abdomen. Legs in structure like those

of the preceding species. Fore wings very much longer than the body; costa rounded. Hind wings pellucid, extending a little beyond the fore wings. Length of the body 13 lines; expansion of the fore wings 44 lines.

The costa of the fore wings is much more rounded than that of A. strictum, and the transverse subcostal veins are much more strongly marked than those of A. carinatum.

a. Bombay. Presented by Dr. Leith.

Apion strictum.

Fœm. *Pallide viride, fusiforme, subtus pallide testaceum; caput prothorace angustius, fastigio porrecto lanceolato; prothorax unicarinatus, subtuberculatus, margine postico producto vix angulato; vagina arcuata, apice nigricans, abdomini æquilonga; pedes breviusculi, sat graciles; femora postica denticulata; alæ anticæ corpore multo longiores; alæ posticæ diaphanæ.*

Female. Pale grass-green, fusiform, pale testaceous beneath. Head narrower than the prothorax; tip of the vertex forming a porrect spine; front oblique. Eyes reddish, small, round, slightly prominent. Antennæ whitish testaceous, very much longer than the body. Prothorax very minutely tuberculate, with a well-defined keel, and with three transverse impressed lines; fore border slightly arched; hind border elongated, hardly angular. Sheath of the oviduct curved, blackish at the tip, as long as the abdomen. Legs rather short and slender; femora very minutely dentate beneath; hind tibiæ with minute teeth above. Fore wings much longer than the body; costa and hind border slightly rounded. Hind wings pellucid, extending a little beyond the fore wings. Length of the body 14 lines; expansion of the fore wings 51 lines.

The fore wings are much longer than those of A. carinatum.

a. Bombay. Presented by Dr. Leith.

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Meroncidius vittifrons.

Fœm. *Testaceus; frons nigro univittata; prothorax scaber, antice et postice nigro marginatus; oviductus arcuatus, brevis; pedes nigrospinosi, femoribus quatuor anterioribus trispinosis, femoribus posticis sexspinosis; alæ posticæ diaphanæ.*

Female. Testaceous, nearly cylindrical. Head smooth, tip of the vertex with a knob on each side; front erect, lanceolate between the sockets of the antennæ, with a black stripe. Mandibles black. Eyes tawny, round, rather prominent. Prothorax scabrous, with two well-defined transverse impressed lines; fore border and hind border black; fore border and sides nearly straight; hind border slightly rounded. Oviduct curved, less than one-third of the length of the abdomen. Legs stout; spines black; four anterior femora with three spines beneath beyond the middle; hind femora a little longer than the abdomen, with six spines beneath; four anterior tibiæ with one row of spines; hind tibiæ a little longer than the hind femora. Wings a little shorter than the body. Hind wings

pellucid. Length of the body 15 lines; expansion of the fore wings 30 lines.

The partly black-bordered prothorax distinguishes it from the other Meroncidii.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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For ACANTHODIS ANTENNATA *read* ACANTHODIS ATTENUATA.

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Genus APEREISIS.

Mas. Corpus gracile. Caput prothorace paullo angustius; fastigium e spina brevi sulcata; frons perobliqua. Oculi rotundi, prominuli. Antennæ graciles, basi crassæ, corpore longiores. Prothorax subsellatus, subtuberculatus. Femora antica apice bispinosa. Femora quatuor posteriora subtus uniseriatim spinosa. Tibiæ intermediæ supra bispinosæ. Tibiæ posticæ supra uniseriatim spinosæ, subtus uniseriatim spinulosæ. Alæ abdomine paullo breviores.

Male. Body slender. Head smooth, a little narrower than the prothorax; tip of the vertex forming a short furrowed spine; front very oblique. Eyes round, prominent. Antennæ slender, except at the base, longer than the body. Prothorax minutely tuberculate, slightly saddle-shaped, narrower in front, with two transverse impressed lines; fore border slightly arched; sides and hind border nearly straight. Legs moderately long; fore femora with two apical spines above; four posterior femora with a single row of spines beneath, these are largest on the hiud femora; middle tibiæ with two spines above; hind tibiæ with a row of minute spines beneath, and with a row of larger spines above. Wings a little shorter than the abdomen.

1. APEREISIS ALBIDIFER.

Mas. *Ferruginea; prothorax albido biplagiatus; ala antica sinistra albido uniplagiata; alæ posticæ cinereæ.*

Male. Ferruginous. Prothorax with a long whitish patch on each side. Left fore wing with a whitish patch near the base. Hind wings cinereous. Length of the body 12 lines; expansion of the fore wings 17 lines.

a. Constancia, Brazil. Presented by the Rev. H. Clark.

Genus ANONISTUS.

Mas. Corpus gracile. Fastigium lanceolatum, excavatum. Oculi rotundi, prominuli. Antennæ graciles, basi crassæ. Prothorax rugosus, margine antico subclavato, lateribus margineque postico subrotundatis. Pedes breviusculi, femoribus tibiisque intermediis subtus uniseriatim spinosis, femoribus posticis subtus uniseriatim spinosis, tibiis posticis supra uniseriatim fortiter spinosis. Alæ corpori æquilongæ.

Male. Body slender. Head smooth; tip of the vertex lanceolate, excavated; sockets of the antennæ forming a ridge on the inner side. Eyes round, prominent. Antennæ slender, except at the base. Prothorax

rugose, with two transverse impressed lines; fore border arched; sides and hind border slightly rounded. Legs rather short; fore femora and fore tibiæ unarmed; middle femora and middle tibiæ with a row of stout spines beneath; hind femora shorter than the body, with bristles and a row of stout spines beneath; hind tibiæ as long as the hind femora, with a row of very stout spines above. Wings as long as the body.

ANONISTUS OBLITERANS.

Mas. *Testaceus; antennæ nigricante annulatæ; pedes fusco conspersi; alæ cinereæ; alæ anticæ sectoribus nonnullis fuscis.*

Male. Testaceous. Antennæ with many blackish rings. Legs speckled with brown. Wings cinereous; some of the transverse veins of the fore wings brown. Length of the body 12 lines; expansion of the fore wings 27 lines.

a. Brazil. Presented by Dr. Busk.

Genus CLISIS.

Mas. Corpus sat robustum. Caput breve; fastigium lanceolatum, excavatum; frons subobliqua. Oculi rotundi, valde prominuli. Palpi graciles; articulus apicalis subclavatus. Antennæ graciles, basi incrassatæ, corpore plus duplo longiores. Prothorax postice sublatescens, margine antico subelevato, lateribus margineque postico subrotundatis. Cerci breves. Styli cercis longiores. Pedes longiusculi, tibiis quatuor anterioribus femoribusque uniseriatim spinosis, tibiis posticis quadriseriatim spinosis. Alæ minimæ.

Male. Body moderately stout. Head short; tip of the vertex lanceolate, excavated; sockets of the antennæ forming a ridge on each inner side; front slightly oblique. Eyes round, very prominent. Palpi slender; apical joint subclavate. Antennæ slender, incrassated at the base, more than twice the length of the body. Prothorax widening slightly hindward, with two transverse impressed lines; fore border arched; sides and hind border slightly rounded. Cerci short. Styles longer than the cerci. Legs rather long; hind femora longer than the abdomen, with a row of stout spines beneath; four anterior femora and tibiæ with a row of shorter spines; hind tibiæ as long as the hind femora, with four rows of spines, the upper spines longer than the lower spines.

1. CLISIS ANNULICORNIS.

Mas. *Testaceus; caput postice piceum testaceo quadrilineatum; antennæ nigricante fasciatæ; prothorax vittis duabus piceis latis valde excavatis; abdomen ferrugineum; pedes anteriores nigricante fasciati; femora postica extus nigricante punctata.*

Male. Testaceous. Head piceous along the hind border, this hue including four pale testaceous longitudinal lines. Antennæ pale testaceous, with numerous blackish bands. Prothorax with two piceous broad stripes, which are much excavated. Abdomen and rudimentary wings ferruginous. Hind femora with a row of blackish points on the outer side; four anterior femora and tibiæ with a few blackish bands. Length of the body 12 lines.

a. Brazil. Presented by J. P. G. Smith, Esq.

Genus ACANTHODIPHRUS.

Fœm. Corpus sat gracile. Caput prothoraci æquilatum; frons perparum obliqua. Oculi rotundi, prominuli. Palpi maxillares sat longi; articulus 4us subclavatus, 2o multo longior. Antennæ graciles, corpore longiores. Prothorax tuberculatus, sellatus, margine antico subdentato oblique unispinoso, margine postico retuso quadrispinoso. Abdomen subcompressum. Cerci lanceolati, robusti, breves. Vagina perparum arcuata, abdomini æquilonga. Pedes longi, femoribus quatuor posterioribus uniseriatim spinosis, tibiis quatuor posterioribus genubusque spinosis. Alæ brevissimæ.

Female. Body rather slender. Head as broad as the prothorax; sockets of the antennæ forming ridges on the inner side; front very slightly oblique. Eyes round, prominent. Palpi moderately long. Second joint of the maxillary palpi much longer than the first and than the third; fourth subclavate, much longer than the second. Third joint of the labial palpi clavate. Antennæ slender, longer than the body. Prothorax tuberculate, saddle-shaped, with two transverse impressed lines; fore border arched, slightly dentate, with an obliquely ascending spine; hind border retuse, with two spines on each side. Abdomen slightly compressed. Cerci lanceolate, stout, short. Oviduct with an ensiform and very slightly curved sheath, full as long as the abdomen. Legs long; four posterior femora armed with one row of stout spines; knees and four posterior tibiæ armed with spines. Wings rudimentary.

Nearly allied to Polyancistrus.

Acanthodiphrus conspersus.

Fœm. *Fuscus, testaceo confertim maculatus et punctatus; antennæ testaceo annulatæ.*

Female. Brown, thickly and irregularly speckled with pale testaceous spots, dots and points. Antennæ with many pale testaceous rings. Oviduct, legs and fore wings speckled like the body. Length of the body 16 lines.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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Cymatomera paradoxa.

paradoxa, *Gerst. Arch. Naturg.* xxxv. 214.

Zanzibar.

Mecopoda elongata.

Decticus tenebrosus, p. 263.

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Mecopoda frontalis.

Fœm. *Nigricans; caput lave, fastigio maculaque frontali luteis; antennæ rufescentes; prothorax punctatus; vagina subarcuatus, abdomini æquilonga; tibiæ anticæ fulvæ; alæ anticæ obscure fuscæ.*

Female. Blackish. Head smooth; tip of the vertex and an adjoining conical spot on the front luteous. Eyes tawny, short-elliptical, slightly prominent. Antennæ reddish. Prothorax punctured; transverse impressed lines indistinct. Sheath of the oviduct slightly curved, as long as the abdomen. Hind femora much longer than the body, with a few minute spines beneath; hind tibiæ as long as the hind femora; fore tibiæ tawny. Fore wings dark brown, much longer than the body. Length of the body 16 lines; expansion of the fore wings 48 lines.

The prothorax is narrower than that of M. latipennis.

a. Sierra Leone. From Mr. Salmon's collection.

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PROSCOPIA SEXSPINOSA.

sexspinosa, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi. 237.
Chili.

PROSCOPIA GRACILIS.

gracilis, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

PROSCOPIA AUSTRALIS.

australis, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

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TRYXALIS UNGUICULATA.

rosana? *Charp. Lucas, A. S. E. F. 2me Ser.* ix. 355.
Algeria.

TRYXALIS VARIABILIS.

unguiculata, *var.?*

a. Egypt. From M. Brunner de Wattenwyl's collection.

TRYXALIS SULPHURIPENNIS.

sulphuripennis, *Gerst. Arch. Nat.* xxxv. 215.
Zanzibar.

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TRYXALIS SINENSIS.

Mas. *Testacea, tricarinata, fulvo subquadrivittata; prothorax capiti æquilongus, margine postico fere recto; alæ posticæ diaphanæ, pallido venosæ.*

Male. Testaceous. Head and prothorax with three slight keels and with four indistinct tawny stripes. Head lanceolate, slightly ascending, as long as the prothorax. Prothorax with two slight transverse impressed lines; fore border, sides and hind border nearly straight. Hind femora

much shorter than the body; hind tibiæ as long as the hind femora. Hind wings pellucid, somewhat shorter than the fore wings; veins pale. Length of the body 16 lines; expansion of the fore wings 49 lines.

In this species and in the following one the prothorax is shorter and is less attenuated in front than that of T. nasuta and its allies, and has not an angular hind border.

a. China. Presented by G. T. Lay, Esq.

TRYXALIS DIMINUTA.

Mas. *Pallide testacea, gracillima, subtricarinata; caput vix ascendens, prothorace paullo longius; prothoracis margo posticus fere rectus; alæ posticæ diaphanæ, pallido venosæ.*

Male. Pale testaceous, very slender. Head and prothorax with three very slight keels. Head a little longer than the prothorax, hardly ascending, forming an elongated cone in front of the eyes. Prothorax with two very slight transverse impressed lines; fore border, sides and hind border nearly straight. Hind femora much shorter than the body; hind tibiæ somewhat shorter than the hind femora. Hind wings pellucid, much shorter than the fore wings; veins pale. Length of the body 10 lines; expansion of the fore wings 19 lines.

a. China. Presented by G. T. Lay, Esq.

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PYRGOMORPHA ROSACEA.

Mas. *Testacea aut viridis; caput prothorace brevius, fastigio subcarinato, fronte perobliqua; prothorax tricarinatus, margine postico rotundato; femora postica corpore breviora; alæ anticæ fusco unistrigatæ; alæ posticæ roseæ.*

Male. Testaceous or green. Head very slightly ascending, shorter than the prothorax; tip of the vertex conical, with a very slight keel; front very oblique, with four distinct diverging keels. Prothorax with three well-defined keels and with two very slight transverse impressed lines; fore border and sides straight; hind border rounded. Hind femora shorter than the body; hind tibiæ a little shorter than the hind femora, their spines very minute. Fore wings with a brown streak extending from the base in the disk. Hind wings rosy. Length of the body 10—13 lines; expansion of the fore wings 16—20 lines.

Closely allied to P. rosea; the fore wings are more rounded at the tips and the hind wings are more wholly rosy.

a, b. South Africa. Presented by Sir A. Smith.
c. Natal. From M. Gueinzius' collection.

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Genus 9. PERENA.

The longer and more ascending head and the thin broad oblique spine of the prosternum distinguish this genus from Opomala.

Genus 10. OPOMALA.

The American species form three groups. The first is represented by bivittata, viridis, filiformis, vittata and femoralis.

The second group is limited to cylindrodes, and is distinguished from the first by the broad fastigium.

The third also includes one species and is distinguished from the first and from the second by the structure of the prothorax, which has a keel and becomes narrower in front. It hardly belongs to this genus.

In Africa there is one group which resembles the second American group as regards the fastigium, but has a keeled prothorax. O. basalis and O. interlineata are varieties of one species.

In Asia there are two types. The first, including convergens and tarsalis, corresponds with the first American group. The second, represented by semipicta and galeata, agrees with the African form.

The Australasian O. inornata agrees with the third American group in the prothorax, which tapers towards the head, but does not recede so much as that species from the typical form of the genus.

In Australia the first group, represented by O. sordida, comes nearest to the Australasian species, but the prothorax is keeled and is less narrowed in front.

The second group includes amæna, brevitibia and brevicornis, and corresponds to the first American group.

Picta, cingulata and serrata, whose habitat is unknown, agree with the African form.

The following species is referred with doubt to this genus:—

Mas. Corpus gracillimum, fere cylindricum. Caput productum, subpunctatum; fastigium subcarinatum, triangulare; frons dense punctata, valde retracta. Oculi obliqui, non prominuli. Antennæ graciles, subplanæ, fere filiformes, prothorace paullo longiores. Prothorax dense punctatus, postice vix latescens, margine postico valde rotundato. Prosterni spina crassa, transversa, obtusa. Abdomen compressum. Femora postica abdomine multo breviora. Alæ anticæ angustæ, corpore multo breviores.

Male. Body very slender, nearly cylindrical. Head elongate, slightly punctured; tip of the vertex flat, triangular, with a slight keel; front thickly punctured, very much retracted; four distinct keels, diverging towards the face. Eyes elongate-oval, oblique, not prominent. Antennæ slender, nearly filiform, slightly flattened, a little longer than the prothorax. Prothorax thickly punctured, hardly widening hindward; transverse impressed lines slightly marked; fore border slightly rounded; sides straight; hind border much rounded. Prosternal spine thick, transverse, obtuse at the tip. Abdomen compressed. Hind femora much shorter than the abdomen; hind tibiæ a little shorter than the hind femora. Fore wings narrow, much shorter than the body.

Opomala? Syrica.

Mas. *Fulva; vertex albidus, piceo aut fulvo lineolatus; antennæ pallide lutea; alæ anticæ albidæ, pallido venosæ.*

Male. Tawny. Head above whitish, with some tawny or piceous longitudinal lines. Eyes livid, with blackish longitudinal lines. Antennæ pale luteous. Fore wings whitish; veins pale. Hind wings pellucid; veins black towards the tips. Length of the body 13½—19 lines; expansion of the fore wings 20—26 lines.

a, b. Dead Sea, Syria. From Mr. Lowne's collection.

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OPOMALA APTERA.

aptera, *Scudd. Trans. Amer. Ent. Soc.* ii. 305.

Pennsylvania.

Page 510.

OPOMALA CASTANEA.

castanea, *Watt. Verh. Zool. Bot. Ges. Wien.* 1861.

Paramaribo.

OPOMALA STENOBOTHROIDES.

Mas. *Fulva, gracilis, subtus testacea; caput et prothorax nigricante bivittata; caput longiusculum, fastigio conico transverse arcuatim sulcato, fronte punctata carinis quatuor bene determinatis; antennæ planæ, lanceolatæ; femora postica extus nigricante univittata; alæ anticæ pallide viridescentes, guttis nonnullis strigaque basali nigris; alæ posticæ diaphanæ.*

Male. Tawny, slender, testaceous beneath. Head and prothorax with two blackish very irregular stripes on the outer sides of the lateral keels. Head elongate; tip of the vertex conical, prominent, with a conical-shaped furrow; front punctured, oblique, with four well-defined keels which diverge towards the face. Eyes pyriform. Antennæ flat, slightly dilated towards the base. Prothorax minutely punctured, with a slight dorsal keel; lateral keels sharply defined. Hind femora a little longer than the abdomen, with a blackish stripe on the outer side. Hind tibiæ a little shorter than the hind femora; spines with black tips. Fore wings pale green, with several black dots which are in a single row towards the base; a hinder black streak near the base. Hind wings pellucid. Length of the body 16 lines; expansion of the fore wings 28 lines.

a. Chontales, Nicaragua. From Mr. Janson's collection.

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OPOMALA BRACHYPTERA.

brachyptera, *Gerst. Arch. Naturg.* xxxv. 216.

Zanzibar.

OPOMALA JAVANICA.

Mas. *Nigricante ferruginea, subtus fulva; fastigium conicum; antennæ capiti et prothoraci ad unum æquilongæ; abdomen fulvo bivittatum; femora postica subtus rufescentia; alæ posticæ cinereæ, apice nigricantes.*

Male. Blackish-ferruginous, slender. Head and prothorax with three very slight keels. Head a little shorter than the prothorax; tip of the vertex conical; front oblique, with four slight diverging keels. Eyes ferruginous, elongate-oval, oblique. Antennæ lanceolate, slender, as long as the head and the prothorax together. Prothorax flat above; fore border and sides straight; hind border slightly rounded. Pectus, two stripes on the abdomen and under side of the latter tawny. Hind femora as long as the abdomen, reddish beneath; hind tibiæ shorter than the hind femora, with two rows of minute spines above. Fore wings shorter than the body. Hind wings cinereous, blackish at the tips, shorter than the fore wings. Length of the body 12 lines; expansion of the fore wings 20 lines. *

The colour distinguishes it from O. fumosa and from O. tæniata, and the structure from O. pisciformis. The prothorax is broader than that of O. galeata.

a. Java. From Mr. Argent's collection.

Opomala tenebrosa.

Fœm. *Picea aut ferruginea, subcarinata, substriata; caput fastigio plano brevi-conico, fronte fulva obliqua nigro conspersa; antennæ lanceolatæ, capite duplo longiores; femora postica abdomini æquilonga; alæ posticæ cinereo hyalinæ, apice nigricantes.*

Female. Piceous or ferruginous, slender, slightly compressed. Head and prothorax with a very slight middle keel and with a few very slight longitudinal ridges. Tip of the vertex flat, short-conical; front tawny, oblique, speckled with black, with four well-defined diverging keels; inner keels united near the tip of the vertex. Antennæ flat, lanceolate, about twice the length of the head. Prothorax with a very slight keel on each side; fore border hardly rounded; hind border slightly rounded. Hind femora as long as the abdomen. Hind tibiæ a little shorter than the hind femora; spines stout, of equal size. Fore wings with irregular and very minute areolets; those towards the tips larger, elongated and regular. Hind wings cinereous, hyaline, blackish at the tips; veins black, pale green or yellowish at the base and along the interior border. Length of the body 14 lines; expansion of the fore wings 24 lines.

Yunan. In Dr. Anderson's collection.

Page 520.

Genus XIPHOCERA.

In America the first group includes emarginata (= inclarata), trilineata, funesta, auripennis, jucunda and plagiata. The last species differs slightly from the rest, the prothorax not being narrower in front.

The second group (basalis and elegans) differs from the first by the much crested prothorax, and perhaps should be removed to Tropinotus.

The two Asiatic species differ widely from those of America, and perhaps should be transferred to Opomala.

T

* Too large to be a [illegible] very [illegible] for Nathalia.

The Australian group is also closely allied to Opomala and forms two subgroups; one with lanceolate antennæ, ex X. adusta; the other with filiform antennæ, ex X. exempta and X. opomaloides.

Xiphocera interrupta.

Mas. *Nigra, subtus lutea, subscabrosa; caput luteo quadrivittatum, prothorace multo brevius, fronte lutea nigro varia; antennæ capiti et prothoraci ad unum æquilongæ, articulis apice luteis; prothorax subcarinatus, striga dorsali strigis duabus obliquis vittisque quatuor luteis; abdomen luteo bivittatum, segmentis luteo marginatis; pedes luteo notati, femoribus posticis abdomine paullo longioribus; alæ anticæ nigricantes, luteo strigatæ; alæ posticæ roseæ.*

Male. Black, luteous beneath. Head and prothorax slightly scabrous. Head much shorter than the prothorax, with four luteous stripes, two on the vertex and two between the eyes and the hind border; tip of the vertex conical; front luteous, long, oblique, varied with black inner keels, nearly contiguous; outer keels diverging. Eyes ferruginous, nearly round, slightly prominent. Antennæ slightly tapering, as long as the head and the prothorax together; tips of the joints luteous. Prothorax with a slight keel and with two strongly-marked transverse impressed lines; a slight luteous streak in the middle, two oblique luteous streaks, and on each side two luteous stripes which are united in front; fore border and hind border slightly rounded; sides nearly straight. Abdomen with two luteous stripes and with a luteous band on the hind border of each segment. Femora and tibiæ with numerous luteous spots; hind femora a little longer than the abdomen; hind tibiæ a little shorter than the hind femora, their spines minute. Fore wings blackish, with luteous streaks, shorter than the body. Hind wings rosy. Length of the body 12 lines; expansion of the hind wings 23 lines.

a. Interior of S. Africa. Presented by the Earl of Derby in 1843.

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Xiphocera fumida.

Var. Fœm. *Fulva; caput et prothorax substriata, tricarinata; frons testacea, punctata, perobliqua; femora postica abdomine longiora; alæ anticæ cinereæ, corpore breviores; alæ posticæ diaphanæ.*

Female. Tawny, slender. Head and prothorax with three slight keels and with very slight intermediate ridges. Head shorter than the prothorax; tip of the vertex conical; front testaceous, punctured, very oblique, with four distinct diverging keels. Eyes ferruginous, elongate-oval, oblique, not prominent. Antennæ flat, lanceolate, shorter than the head and the prothorax together. Prothorax with two slight transverse impressed lines; fore border and sides straight; hind border rounded. Hind femora longer than the abdomen; hind tibiæ a little shorter than the hind femora, their spines small. Fore wings cinereous, shorter than the body. Hind wings pellucid. Length of the body 13 lines; expansion of the fore wings 23 lines.

b. South Hindostan. Presented by M. J. Walhouse, Esq.

Xiphocera vittifera.

Fœm. *Nigra; caput et prothorax luteo quadrivittata; caput prothorace paullo brevius, fastigio truncato, fronte perobliqua luteo quadrivittata; antennæ capiti et prothoraci ad unum æquilongæ; prothorax luteo quadristrigatus; femora postica luteo bivittata, corpore paullo breviora; alæ anticæ luteo bivittatæ, corpore paullo longiores; alæ posticæ roseæ, apices versus nigræ.*

Female. Black, slender. Head and prothorax hardly scabrous, with four luteous stripes, the outer stripes interrupted by the eyes, connected with the inner stripes on the tip of the vertex. Head a little shorter than the prothorax; tip of the vertex truncate-conical; front very oblique, with two luteous stripes and with four slight keels; inner keels nearly contiguous; outer keels diverging. Eyes ferruginous, elliptical, not prominent. Antennæ flat, slightly tapering, as long as the head and the prothorax together. Prothorax with two luteous streaks on each side between the outer and inner stripe and with a very slight keel; fore border and sides straight; hind border rounded. Hind femora a little shorter than the body, with two luteous stripes on the outer side; hind tibiæ a little shorter than the hind femora, their spines small. Fore wings a little longer than the body, with two luteous stripes. Hind wings rosy, black about the tips. Length of the body 10 lines; expansion of the fore wings 24 lines.

a. Natal. From M. Gueinzius' collection.

Page 531.

Genus XIPHOPHORA.

Xiphophora, *Sauss. Rev. Zool. Ser.* 2, xi. 391.

1. Xiphophora Americana.

Americana, *Sauss. Rev. Zool. Ser.* 2, xi. 391.

Guyana.

Page 529.

Genus TROPINOTUS.

The longer hind legs distinguish the structure of the American species from that of the Australian species.

Page 533.

Akicera lineosa.

Mas. *Cinerea; fastigium longum, nigro marginatum, antice incisum; frons fulva, nigro guttata; prothorax tuberculatus, albido bilineatus, crista serrata, margine postico angulato bidentato; venter testaceus; femora postica supra uniseriatim spinosa, subtus bispinosa; alæ anticæ corpore paullo breviores; alæ posticæ pallide cinereæ, antice obscuriores nigro venosæ.*

Male. Dark cinereous. Vertex of the head elongated, depressed, bordered with black on each side, rounded and notched on the fore border; front tawny, erect, with some black dots, and with four well-defined

diverging keels. Eyes tawny, elliptical, prominent. Antennæ lanceolate, shorter than the prothorax. Prothorax tuberculate, with a deeply and irregularly serrated crest, and on each side with a whitish line, which extends to half the length from the fore border; hind part elongated, angular, bidentate. Abdomen testaceous beneath. Hind femora as long as the abdomen, with a row of spines above, and with two spines beneath; hind tibiæ as long as the hind femora, black on the inner side, with two rows of spines on the upper side. Fore wings a little shorter than the body; costa rounded near the base. Hind wings pale cinereous; anterior half darker and with black veins. Length of the body 15 lines; expansion of the fore wings 28 lines.

The prothorax is more deeply jagged than that of A. horrida.

a. Interior of South Africa. Presented by the Earl of Derby in 1843.

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PAMPHAGUS ATROX.

atrox, *Gerst. Arch. Naturg.* xxxv. 218.

Zanzibar.

Page 536.

PORTHETIS QUADRIDENTATA.

Acinipe quadridentata, *Brisout*, *A. S. E. F.* 2*me Ser.* x. *Bull.* lxvii.—Acridium quadridentatum, *Brisout*, *A. S. E. F.* 3*me Ser.* ii. *Bull.* lxxii.

Algeria.

PORTHETIS DECIPIENS.

Acinipe microptera, *Brisout*, *A. S. E. F.* 1850. *Bull.* lxiii. *Lucas*, *A. S. E. F.* 2*me Ser.* x. 360—Acridium decipiens, *Brisout*, *A. S. E. F.* 3*me Ser.* ii. *Bull.* lxxii.

Algeria.

PORTHETIS SITIFENSIS.

Acridium Sitifense, *Brisout*, *A. S. E. F.* 3*me Ser.* ii. *Bull.* lxxi.

Setif. Algeria.

PORTHETIS SIMILLIMA.

similima, *Yersin*, *A. S. E. F.* viii. 529.

Sicily.

PORTHETIS RUBRIPES.

Nocarodes rubripes, p. 537.

a—*c*. Asia Minor. From M. Brunner de Wattenwyl's collection.

ACOCERA RAULINII.

Porthetis Raulinii, *Lucas*.

a. Syria. From M. Brunner de Wattenwyl's collection.

ACOCERA STRAUBEI.

Straubei, *Fieb.*

a, *b*. Asia Minor. From M. Brunner de Wattenwyl's collection.

ACOCERA GALLERICULATA.

gallericulata, *Brunner, MS.*

a, b. Syria. From M. Brunner de Wattenwyl's collection.

Page 540.

PHYMATEUS CALLIPAREUS.

Gryllus ferrugineus, *Fabr. Ent. Syst.* ii. 56.

Page 543.

PŒCILOCERA ÆGROTA.

ægrota, *Gerst. Arch. Naturg.* xxxv. 216.

Zanzibar.

PŒCILOCERA ATRICEPS.

atriceps, *Gerst. Arch. Naturg.* xxxv. 216.

Zanzibar.

Page 545.

PETASIA HECATE.

Hecate, *Gerst. Arch. Naturg.* xxxv. 217.

Zanzibar.

PETASIDA CONCINNA.

Fœm. *Fulva, subtus flava ; caput et prothorax flavo quadrivittata ; frons scabra ; antennæ nigricantes, basi rufescentes ; prothorax scaber, flavo biguttatus, vix carinatus ; abdominis segmenta flavescente marginata ; pedes flavescentes, femoribus posticis extus ferrugineo univittatis ; alæ posticæ roseæ.*

Female. Tawny, yellow beneath. Head and prothorax with four yellow stripes; inner stripes extending along the inner sides of the eyes, and connected on the tip of the vertex; outer stripes on the outer sides of the eyes, marginal in the prothorax. Head nearly smooth above; tip of the vertex angular; front scabrous, oblique, with four slight keels, the inner keels nearly contiguous. Eyes livid, oval, oblique. Antennæ blackish, reddish towards the base. Prothorax scabrous, with three transverse impressed lines, and with an extremely slight keel; inner stripes not extending hindward of the third line; a yellow dot on each side between the second and third lines. Hind borders of the abdominal segments yellowish. Legs yellowish; hind femora full as long as the abdomen, with a ferruginous stripe on the outer side; hind tibiæ shorter than the hind femora, with two rows of small spines on the upper side. Wings rudimentary. Hind wings rosy. Length of the body 14 lines.

The tip of the vertex is much shorter than that of P. discrepans.

a. ———?

PETASIDA DISCREPANS.

Fœm. *Ferruginea ; caput et prothorax flavo bivittata ; vertex vittulis duabus flavis ; frons scabra, obliqua ; prothorax scaber, subcarinatus ; alæ posticæ roseæ.*

Female. Ferruginous. Head and prothorax with two yellow stripes, which are marginal in the latter. Head much shorter than the prothorax; vertex with two yellow stripes, which do not extend in front of the eyes; tip elongate-conical; front scabrous, oblique, with four slight keels, the inner keels nearly contiguous. Eyes tawny, elliptical, oblique, slightly prominent. Prothorax scabrous, with three slight transverse impressed lines and with a very slight keel; fore border, sides and hind border nearly straight. Hind femora as long as the abdomen; hind tibiæ shorter than the hind femora, with two rows of spines above. Wings rudimentary. Hind wings rose-colour. Length of the body 12 lines.

a. Australia. From Mr. Daniel's collection.

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CYRTACANTHACRIS PRASINA.

This species and C. auricornis are probably varieties of one species, in which, and in C. pictipes, the longer body, the longer hind legs and the shorter fore wings recede from the typical form; it is near allied to the genus Heteracris.

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CYRTACANTHACRIS FLAVICORNIS.

It has a peculiar structure, and seems to represent the American genus Tropidacris.

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CYRTACANTHACRIS OBLIQUA.

Fœm. *Testacea, gracilis; fastigium planum, subhexagonale; frons scabra, carinis quatuor bene determinatis; prothorax scaber, carinulis tribus piceis; prosterni spina transversa, crassa, obtusa, subobliqua; pectus utrinque strigis obliquis ferrugineis unaque flavescente alba; femora postica intus vitta rufa vittaque nigra informi interrupta; tibiæ posticæ rufæ, spinis albidis apice nigris; alæ anticæ vitta e maculis fuscis subquadratis, venulis transversis exterioribus fusco nebulosis.*

Female. Testaceous, slender. Head smooth above; tip of the vertex flat, subhexagonal, slightly transverse; front scabrous, slightly oblique, with four strongly-marked keels, inner keels parallel, outer keels diverging. Eyes piceous, elongate-elliptical. Prothorax scabrous, nearly flat above, with a slight piceous keel, and with three slight transverse impressed lines; sides abruptly decumbent from the edges of the disk, which are slightly piceous; fore border slightly rounded; sides very slightly angular; hind border much rounded. Prosternal spine thick, obtuse, slightly oblique, its depth exceeding its breadth. Pectus on each side with three ferruginous oblique streaks, and with a posterior yellowish white streak. Hind femora a little shorter than the abdomen, with a red stripe, and with an irregular and interrupted black stripe on the inner side; hind tibiæ red, much shorter than the hind femora, their spines whitish, with black tips. Fore wings extending somewhat beyond the abdomen, with a stripe of sub-

quadrate brown spots proceeding from the base; most of the transverse sectors in the exterior part clouded with brown. Length of the body 16 lines; expansion of the fore wings 32 lines.

a. China. Presented by J. Brenchley, Esq.

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CYRTACANTHACRIS BASALIS.

a, *b*. Australia.
c. ——— ?

Two specimens are transferred from C. plagiata to this species.

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CYRTACANTHACRIS EXACTA.

Var.? Mas. *Fulva; prothorax linea, plagis duabus posterioribus margineque postico nigris; femora postica lineola exteriore nigricante, vitta interiore nigra informi interrupta; tibiæ posticæ rufescentes; alæ anticæ cinereæ, striga costali basali flavescente, maculis guttisque plurimis nigris.*

Var.? Male. Tawny, slender. Head smooth; tip of the vertex depressed, hexagonal; front slightly oblique, with four well-defined slightly diverging keels. Eyes piceous, elongate-elliptical. Prothorax scabrous, with a very slight keel, and with four transverse impressed lines, widening above between the fourth impressed line and the hind border; a black line along the keel from the fore border to the fourth impressed line; a black posterior patch on each side; hind border bordered with black, and much rounded. Prosternal spine testaceous, lanceolate, rather slender, extending to the mesosternum. Hind femora a little longer than the abdomen, with a slight blackish line along the outer side, and with a black irregular and interrupted stripe on the inner side; hind tibiæ reddish, a little shorter than the hind femora, their spines with black tips. Wings cinereous, extending much beyond the abdomen. Fore wings with a yellowish costal streak extending from the base, and with many black spots of various size and shape in the disk; these spots are largest towards the base. Length of the body 16 lines; expansion of the fore wings 36 lines.

a. Vavou. Presented by J. Brenchley, Esq.

Fœm.? *Caput et prothorax nigro late bivittata, capitis vittis cinereo oblique strigatis, prothoracis vittis excavatis; femora postica nigricante bivittata; tibiæ posticæ pallide fulvæ; alæ anticæ maculis nonnullis cinereis nigro marginatis.*

Female? Head and prothorax with two broad black stripes, each of which in the head contains two oblique cinereous streaks, and is excavated in the prothorax. Hind femora with a blackish stripe on each side; hind tibiæ pale tawny, their spines whitish, with black tips. Spots on the fore wings more regular than those of the male; several of them with cinereous disks. Length of the body 17 lines; expansion of the fore wings 38 lines.

b. Tongatala. Presented by J. Brenchley, Esq.

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CYRTACANTHACRIS PUNCTIPENNIS.

Mas. *Fulva, gracilis, subtus testacea; fastigium planum, fere rotundum; frons punctata; prothorax subcarinatus, margine postico subproducto subangulato; prosterni spina crassa, obliqua, apice rotundata; abdomen testaceum, vitta picea abbreviata; alæ anticæ e punctis nigricantibus subfasciatæ, apice cinereæ; alæ posticæ cinereæ.*

Male. Tawny, slender, testaceous beneath. Head short; tip of the vertex depressed, nearly round; front punctured, slightly oblique, with four well-defined diverging keels; inner keels ending in the flat ridge, which extends from the tip of the vertex. Antennæ slender, a little longer than the head and the prothorax together. Prothorax with a very slight keel, which is not apparent near the hind border; four transverse impressed lines, the first, as usual, widely interrupted in the middle; fore border hardly curved; hind border slightly elongated and angular. Prosternal spine thick, oblique, rounded at the tip, approaching the mesosternum. Abdomen testaceous, with a piceous stripe, which extends from the base to beyond half the length. Fore wings cinereous towards the tip, with numerous blackish points, which mostly form very irregular bands; a row of subcostal black more determinate points. Hind wings cinereous; veins black. Length of the body 15 lines; expansion of the fore wings 30 lines.

The prosternal spine is shorter, stouter and more obtuse than that of C. rubiginosa, which it closely resembles. The speckled fore wings distinguish it from C. spissa.

Yunan. In Dr. Anderson's collection.

Page 582.

ACRIDIUM MELANOCERUM.

Var. A. tibiale, p. 582.

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ACRIDIUM CRIBRIFRONS.

Mas. *Fulvum, sat robustum, subtus testaceum; frons scabra; prothorax carinatus, subtiliter scaber, margine postico subangulato; prosterni spina pallide testacea, vix acuta; alæ anticæ cinereæ, corpore paullo longiores, venulis nonnullis transversis fuscescente nebulosis.*

Male. Tawny, rather stout, testaceous beneath. Head smooth; vertex with a very slight keel, its tip hexagonal and scabrous; front scabrous, with four well-defined keels; inner keels parallel; outer keels diverging slightly towards the face. Eyes ferruginous, elliptical. Prothorax finely scabrous, with a distinct keel, and with slight transverse impressed lines; a few black spots in the disk; fore border and sides nearly straight; hind border slightly elongated and angular. Prosternal spine pale testaceous, moderately stout, hardly acute. Hind femora as

long as the abdomen; hind tibiæ a little shorter than the hind femora, their spines with black tips. Fore wings cinereous, a little longer than the body; veins testaceous; a few of the transverse sectors clouded with pale brown. Hind wings pellucid; veins whitish. Length of the body 15 lines; expansion of the fore wings 30 lines.

a. Gambia. From Mr. Rendall's collection.

ACRIDIUM CONTINUUM.

Mas. *Testaceum, gracile; caput et prothorax fusco late univittata; fastigium rotundatum; antennæ nigræ, basi testaceæ; prothorax flavescente bivittatus, carinis tribus bene determinatis; prosterni spina robusta, fere cylindrica; tibiæ posticæ pallide flavescentes, basi fulvo bifasciatæ; alæ anticæ cinereæ, vittis duabus e lituris nigro venosis.*

Male. Testaceous, slender. Head and prothorax with a broad brown stripe, which extends nearly to the tip of the vertex. Head short; tip of the vertex flat, rounded; front erect, with four slight keels; inner keels parallel; outer keels diverging. Eyes fusiform. Antennæ black, testaceous at the base. Prothorax with three well-defined keels; a pale yellowish stripe on each side of the brown stripe; transverse impressed lines strongly marked; fore border, sides and hind border very slightly rounded. Prosternal spine stout, nearly cylindrical, rounded at the tip. Hind femora as long as the abdomen. Hind tibiæ pale yellowish, a little shorter than the hind femora, with two tawny bands, one basal, the other near the base; spines black towards the tips. Fore wings cinereous, extending a little beyond the abdomen, with two stripes of small marks, which are formed by black veins, and are indistinct towards the tips. Length of the body 16½ lines; expansion of the fore wings 32 lines.

The prothorax is not contracted in front like that of A. peregrinum.

a. Mount Sinai. Presented by R. M'Andrew, Esq.

ACRIDIUM SUBPUSTULATUM.

Mas. *Fulvum, subtus testaceum; caput et prothorax fusco late univittata; fastigium subpentagonale; prothorax testaceo tuberculatus, plagis duabus lateralibus transversis fuscis; prosterni spina transversa, postice excavata; femora postica supra fusco triplagiata; tibiæ posticæ subtus fuscæ; alæ anticæ cinereæ, fusco plagiatæ.*

Male. Tawny, testaceous beneath. Head and prothorax with a broad brown stripe, which tapers from the tip of the vertex to the hind border of the prothorax. Head rather small; tip of the vertex transverse, flat, subpentagonal; front erect, with four strongly-marked diverging keels. Eyes subfusiform. Prothorax narrower in front, with pale tubercles, and with three slight keels, the lateral keels diverging hindward; a large brown transverse patch on each side; fore border slightly rounded; hind border more rounded; sides nearly straight. Prosternal spine stout, transverse, tapering to the tip, excavated on the hind side. Hind femora with three brown patches above, as long as the abdomen. Hind tibiæ almost as long as the hind femora, brown beneath; spines very stout, with

black tips. Wings cinereous. Fore wings extending rather beyond the abdomen, with several large well-defined brown patches. Length of the body 19 lines; expansion of the fore wings 36 lines.

a. West Australia. From M. Du Boulay's collection.

ACRIDIUM PUSTULIFERUM.

Fœm. *Nigricans; caput et thorax flavo bivittata; caput vittis duabus interioribus guttisque paucis flavis, fronte flavo tuberculata; prothorax scaber, flavo tuberculatus; prosterni spina transversa; pectus flavescens; femora quatuor anteriora flavo conspersa; alæ brevissimæ.*

Female. Blackish. Head and prothorax with two yellow stripes, which extend along the outer sides of the eyes and are marginal in the prothorax. Head above smooth, with two yellow stripes which extend along the inner sides of the eyes; a few yellow dots along the inner sides of these stripes; tip of the vertex short-conical, its disk depressed; front erect, with yellow tubercles, and with four slight keels; inner keels approximate. Eyes ferruginous, short-oval, rather prominent. Antennæ black, yellowish at the base beneath. Prothorax scabrous, with many yellow tubercles, and with four well-defined transverse impressed lines. Prosternal spine stout, its breadth exceeding its thickness. Pectus yellowish. Four anterior femora with yellow speckles. Wings rudimentary. Length of the body 22 lines.

a. West Australia. From M. Du Boulay's collection.

ACRIDIUM SCITULUM.

Fœm. *Nigrum; caput apud marginem anticum, pectus et venter testacea; caput apud oculos fulvum, fastigio fere rotundo; antennæ rufescentes; prothorax subtricarinatus, lateribus fulvis nigro uniplagiatis; prosterni spina obliqua, sat gracilis; abdominis dorsum fuscescens; femora postica abdomine paullo longiora, supra fuscescentia; tibiæ posticæ supra nigricantes; alæ anticæ cinereæ, guttis plurimis strigaque postica basali fuscis; alæ posticæ diaphanæ.*

Female. Black. Head towards the mouth, pectus and under side of the abdomen testaceous. Head full as broad as the fore border of the prothorax, tawny about the eyes; tip of the vertex depressed, nearly round; front erect, with four slight diverging keels. Eyes lurid, elliptical. Antennæ reddish. Prothorax tawny, except between the lateral keels; a black patch on each side; keels slight, the lateral pair diverging hindward; fore border and sides straight; hind border slightly rounded. Prosternal spine oblique, rather slender, slightly tapering. Abdomen and hind femora brownish above, the latter a little longer than the former. Hind tibiæ nearly as long as the hind femora, blackish above; spines with black tips. Fore wings cinereous, with many brown dots; a brown basal streak along the hind border. Hind wings pellucid; veins whitish, black towards the costa. Length of the body 14 lines; expansion of the fore wings 30 lines.

a. ——— ?

ACRIDIUM OBTUSIFERUM.

Fœm. *Fulvum; caput breve, fastigio fere rotundo, fronte subpunctata; prothorax subcarinatus, confertim et subtilissime punctatus, margine postico valde rotundato; prosterni spina incrassata, subclavata; tibiæ posticæ rufæ, femoribus posticis multo breviores; alæ anticæ venulis plurimis transversis nigris; alæ posticæ cinereæ.*

Female. Tawny. Head short; tip of the vertex small, flat, nearly round: front hardly obliqne, slightly punctured, inner keels parallel, outer keels diverging. Eyes piceous, nearly fusiform. Prothorax thickly and very minutely punctured, narrower in front; a very slight keel and three very slight transverse impressed lines; fore border and sides nearly straight; hind border much rounded. Prosternal spine very stout, rounded at the tip and thicker there than at the base. Hind femora as long as the abdomen. Hind tibiæ red, much shorter than the hind femora; spines black towards the tips. Fore wings as long as the body; many of the transverse sectors black. Hind wings cinereous; veins black. Length of the body 16 lines; expansion of the fore wings 36 lines.

Nearly allied to A. innotabile; the spine is more globose at the tip.

a. ———?

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Cyrtacanthacris differentialis, C. divorsifera, C. unilineata and C. munda approach the genus Caloptenus in structure.

Page 617.

CYRTACANTHACRIS PLAGIATA.

a. Australia.

Two specimens recorded as of this species are varieties of C. basalis.

Page 620.

Acridium literosum, A. decoripes and A. maculiferum are perhaps more nearly allied to Caloptenus than to the typical form of Acridium.

Page 622.

Acridium marginale and A. pantherinum may be considered as the types of a new genus; and A. stipatum, A. finale and A. genuale will form another new genus, which is allied to Oxya. A. exemptum represents another new genus.

Page 623.

ACRIDIUM OCCIDENTALE.

occidentale, *Scudder, Bost. Soc. Nat. Hist.* xii. 339.

Napo or Maranon.

ACRIDIUM LABRATUM.

labratum, *Scudder, Bost. Soc. Nat. Hist.* xii. 339.

Napo or Maranon.

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Acridium exclusum, A. alienum, A. pilipes and A. punctarium are near allied to Caloptenus in structure; so also are A. obliquum and A. tenebriferum, but in a less degree.

Page 637.

ACRIDIUM VIRIDE.

viride, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

ACRIDIUM BRACHYPTERUM.

brachypterum, *Philippi, Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

ACRIDIUM CRISTAGALLI.

cristagalli, *Philippi, Reise durch die Wüste Atacama*, 173.
Chili.

ACRIDIUM DECKENI.

Deckeni, *Gerst. Arch. Naturg.* xxxv. 219.
Zanzibar.

ACRIDIUM COANGUSTATUM.

coangustatum, *Lucas, Maillard, Isle de la Reunion, Orth.* 24, pl. 21, f. 3.
Mauritius.

Page 638.

CATANTOPS DECORATUS.

decoratus, *Gerst. Arch. Naturg.* xxxv. 219.
Zanzibar.

Page 650.

OXYA NITIDULA.

Acridium nitidulum, page 631.

OXYA DIMINUTA.

Mas. *Fulva, gracilis, ferrugineo bivittata; caput subproductum, vertice bicarinato, fastigio plano subrhomboidali, frontis carinis quatuor bene determinatis; antennæ apices versus piceæ; prothorax vix carinatus; prosterni spina longa, acuta, sat gracilis; alæ abbreviatæ.*

Male. Tawny, slender. Head and prothorax with two ferruginous stripes, which do not extend beyond the fourth transverse impressed line of the prothorax. Head slightly elongate; vertex with two keels between the eyes; tip depressed, transverse, subrhomboidal; front hardly oblique, with four strongly-marked keels; inner keels slightly curved towards the vertex, parallel towards the face; outer keels diverging towards the face. Antennæ slender, piceous towards the tips. Prothorax with a keel which is hardly apparent except towards the hind border, the latter rounded. Prosternal spine long, acute, rather slender. Spines of the tibiæ with black tips.

Wings half-developed. Hind wings cinereous-hyaline; veins black. Length of the body 10 lines.

Yunan. In Dr. Anderson's collection.

Page 655.

CUCULLIGERA HYSTRIX.

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

HETERACRIS PLORANS.

Euprepocnemis plorans, *Brunner*.

HETERACRIS SIMILIS.

Euprepocnemis similis, *Brunner*, *MS*.

a, *b*. Rhodes. From M. Brunner de Wattenwyl's collection.

Page 668.

HETERACRIS? PRASINIFERA.

Fœm. *Viridis, vittis duabus latis saturatioribus albido marginatis; fastigium planum, triangulare; prothorax subtricarinatus, nigricante bivittatus; prosternum tuberculo lato subfurcato; alæ anticæ apices versus et apud costam fuscescentes, striga discali nigra lata interrupta albido submarginata.*

Female. Grass-green. Head and prothorax finely punctured, with two broad dark green whitish-bordered stripes. Tip of the vertex flat, triangular; front oblique, with four slight keels, the inner keels parallel. Eyes brownish, nearly elliptical. Antennæ tawny, brownish towards the tips. Prothorax with three very slight keels; a blackish stripe adjoining each side, which is straight in front and rounded hindward; hind border much rounded. Prosternum with a transverse broad slightly bifurcate knob. Abdomen and legs testaceous. Fore wings extending to the tip of the abdomen, brownish along the costa and towards the tips, and with a broad interrupted black streak in the disk; this streak is partly and irregularly whitish-bordered. Hind wings cinereous. Length of the body 9½ lines; expansion of the fore wings 14 lines.

a. Bombay. Presented by Dr. Leith.

Page 675.

HETERACRIS? RUFITIBIA.

Fœm. *Viridis, gracilis, fere cylindrica; caput prothorace vix latius, fastigio transverso antice rotundato; antennæ fulvæ, filiformes, prothorace multo longiores, basi pallide virides; prothorax dense punctatus, vix carinatus; prosterni spina gracilis, longiuscula, acuta; venter luteus; femora postica apice viridia; tibiæ posticæ rufæ; alæ brevissimæ.*

Female. Grass-green, slender, nearly cylindrical. Head smooth, hardly broader than the prothorax; tip of the vertex transverse, rounded in front, contracted hindward; front punctured, with four distinct keels;

inner keels parallel; outer keels diverging towards the face. Eyes very pale testaceous, elliptical, oblique, slightly prominent. Antennæ tawny, filiform, slender, pale green at the base, much longer than the prothorax. Prothorax thickly punctured; keel extremely slight; transverse impressed lines very distinct, partly black; fore border, sides and hind border slightly rounded. Prosternal spine slender, acute, rather long. Abdomen luteous beneath. Hind femora as long as the abdomen, green at the tips; hind tibiæ bright red, rather shorter than the hind femora, their spines with black tips. Wings very short. Length of the body 7½ lines.

The specimen described seems to be not fully developed.

a. Java. From Mr. Argent's collection.

CALOPTENUS? DORSIGER.

Fœm. *Testaceus, gracilis, pilosus; caput nigro univittatum, fastigio lanceolato compresso prominulo, fronte obliqua; antennæ nigræ; prothoracæ nigro bistrigatus, crista antice nigra tridentata, margine postico producto angulato; prosterni spina gracilis, obliqua; tibiæ posticæ rufescentes; alæ anticæ pallide virides; alæ posticæ diaphanæ.*

Female. Testaceous, slender, pilose. Head with a black stripe on the vertex; tip lanceolate, depressed, compressed, prominent; front oblique, with four well-defined keels, the inner keels nearly contiguous. Eyes elliptical, rather large. Antennæ black, testaceous at the base. Prothorax subsellate, with a black streak on each side and with a strongly-marked keel, of which the fore part is divided into three black tubercles; lateral keels apparent near the hind border, which is elongated and angular. Prosternal spine slender, oblique. Hind femora shorter than the abdomen. Hind tibiæ reddish, a little longer than the hind femora, their spines with black tips. Fore wings pale green. Hind wings pellucid; veins black. Length of the body 8½ lines; expansion of the fore wings 14 lines.

This species may form a new genus: it has some characters of Tropidacris, though it is of small size; in the tip of the vertex it resembles Stenobothrus.

a. Chili. From Mr. Cuming's collection.

Page 684.

CALOPTENUS STRIGIFER.

Mas. *Fulvus, gracilis; caput brevissimum, fastigio subhexagonali, fronte punctata ex parte nigricante; antennæ luteæ; prothorax nigricante guttatæ et strigatæ, margine postico angulato; prosterni spina gracilis; femora postica subtus nigra, supra nigro biplagiata; alæ posticæ cinereæ.*

Male. Tawny, slender. Head very short; tip of the vertex flat, subhexagonal; front punctured, partly blackish, with four slight keels; inner keels slightly diverging towards the face; outer keels slightly diverging. Eyes large, nearly fusiform, approximate on the vertex. Antennæ luteous. Prothorax widening slightly hindward, with many

black dots and longitudinal streaks; dorsal keel very slight; transverse impressed lines distinct; hind part elongated, angular. Prosternal spine slender. Hind femora a little longer than the abdomen, black beneath and with two black patches above. Hind wings cinereous. Length of the body 7½ lines; expansion of the fore wings 18 lines.

a. Bombay. Presented by Dr. Leith.

Page 690.

Caloptenus Clavelii.

Calliptamus Clavelii, *Lucas*, *A. S. E. F.* 2*me Ser.* ix. 364.

Algeria.

Caloptenus similis.

similis, *Watt. Verh. Zool. Bot. Ges. Wien.* xi. 224.

Egypt. Syria.

Page 706.

Caloptenus signatipes.

Acridium delineolatum, p. 631—A. innotabile, p. 629.

Page 707.

Caloptenus immunis.

Fœm. *Testaceus; fastigium parvum, subhexagonale; prothorax vix carinatus; prosterni spina crassa, non attenuata; abdominis dorsum basi nigricans; femora postica nigricante triplagiata, abdomine paullo longiora; tibiæ posticæ rufescentes; alæ anticæ venulis transversis plurimis nigricantibus; alæ posticæ diaphanæ.*

Female. Testaceous, stout. Head short; tip of the vertex small, depressed, subhexagonal; front erect, with four slight keels; inner keels nearly parallel; outer keels diverging. Eyes subfusiform. Prothorax widening slightly hindward, with an extremely slight keel and with extremely slight transverse impressed lines; fore border and sides straight; hind border rounded. Prosternal spine thick, not tapering towards the tip, which is much rounded. Abdomen blackish above towards the base. Hind femora a little longer than the abdomen, with three blackish patches. Hind tibiæ reddish, almost as long as the hind femora; spines black towards the tips. Fore wings almost as long as the body; many of the transverse sectors blackish. Hind wings cinereous, testaceous along the apical part of the costa; veins mostly pale. Length of the body 12—16 lines; expansion of the fore wings 30—34 lines.

The keel and the strongly-marked transverse impressed lines of the prothorax and its more elongated and angular hind border distinguish C. strenuus from this species. It is a little stouter than C. signatipes, from which it also differs in having red tibiæ.

a. Bombay. Presented by Dr. Leith.

Caloptenus pustulipennis.

Mas. *Fulvus, robustus; caput antice punctatum, fastigio subproducto vix hexagonali; prothorax valde carinatus, subtiliter carinatus, margine postico subangulato; pectus et abdomen fuscescente guttata; alæ anticæ nigro unimaculatæ et nonnunquam triguttatæ; alæ posticæ diaphanæ.*

Male. Tawny, stout. Head nearly as broad as the prothorax; fore part punctured; tip of the vertex slightly elongated, hardly hexagonal; front with four very slight keels, the outer pair slightly diverging towards the face. Eyes ferruginous, elongate-oval. Prothorax minutely punctured, with a strongly-marked keel and with three transverse impressed lines; fore border in the middle and sides slightly rounded; hind border elongated, slightly angular. Pectus and abdomen with numerous minute brownish dots. Legs stout; hind tibiæ nearly as long as the hind femora, their spines with black tips. Fore wings with a black spot and sometimes with two or three black dots in the disk before the middle; costa rounded near the base. Hind wings pellucid; veins pale. Length of the body 17 lines; expansion of the fore wings 27 lines.

a. Bombay. Presented by Dr. Leith.

Caloptenus inamœnus.

Mas. *Piceus; caput bisulcatum, fastigio plano subrhomboidali, fronte punctata; antennæ fulvæ; prothorax subcarinatus, margine postico subproducto subangulato; pectus et abdomen testacea, hujus dorsum basi piceum; prosterni spina longa, robusta, apice rotundata; femora postica supra nigro trimaculata, subtus nigro univittata; tibiæ posticæ rufæ; alæ anticæ cinereæ, fasciis nonnullis apicibusque fuscescentibus; alæ posticæ cinereæ, venis basi viridi-albis.*

Male. Piceous. Head short; vertex with two slender furrows between the eyes; tip flat, subrhomboidal; front punctured, erect, with four distinct keels; inner keels slightly diverging from the vertex to the face; outer keels nearly parallel. Antennæ tawny, as long as the head and the prothorax together. Prothorax with a slight keel, with the usual four transverse impressed lines and with two calli on each side; fore border hardly rounded; hind border slightly elongated and angular. Pectus and abdomen testaceous, the latter piceous above towards the base. Prosternal spine long and stout, rounded at the tip. Hind femora with three black spots on the upper side and with a black stripe beneath. Hind tibiæ red, their spines with black tips. Fore wings cinereous, brownish towards the tips, with several indistinct and irregular bands formed by brownish-clouded veins; costa rounded near the base. Hind wings cinereous; a ferruginous costal streak; veins black, greenish white at the base and along the interior border. Length of the body 12 lines; expansion of the fore wings 22 lines.

The vertex between the eyes is narrower than that of C. brunneus.

Yunan. In Dr. Anderson's collection.

Caloptenus incomptus.

Mas. *Fulvus, subtus testaceus; caput bisulcatum, fastigio plano subrhomboidali; prothorax subcarinatus, margine postico producto subangulato; prosterni spina robusta, longa, subacuta; pedes postici testacei; alæ anticæ cinereæ, basi fulvæ, fasciis nonnullis indeterminatis pallide fuscescentibus; alæ posticæ diaphanæ, apice cinereæ.*

Male. Tawny, testaceous beneath. Head short; vertex with two slender furrows between the eyes; tip flat, subrhomboidal; front in structure like that of C. inamœnus. Antennæ slender. Prothorax with a slight keel and with the usual transverse impressed lines; hind border elongated, slightly angular. Prosternal spine stout, long, slightly acute. Hind legs testaceous; spines of the tibiæ with black tips. Fore wings cinereous, tawny towards the base, with some irregular and indistinct pale brownish bands formed by clouded veins. Hind wings pellucid, cinereous about the tips; a tawny costal streak; veins pale yellow, black towards the tips. Length of the body 10 lines; expansion of the fore wings 20 lines.

Very closely allied to C. inamœnus. The keel of the prothorax is more strongly defined than that of C. signatipes.

Yunan. In Dr. Anderson's collection.

Caloptenus caliginosus.

Mas. *Nigricans; caput apud marginem, pectus et venter testacea; fastigium ellipticum; antennæ rufescentes; prothoracis latera fulvo aut flavescente biplagiata; prosterni spina subtransversa, fere cylindrica; abdomen fulvum, apicem versus fuscum; femora postica subtus testacea, abdomine multo longiora; tibiæ posticæ nigricantes, basi testaceo bifasciatæ; alæ anticæ cinereæ, nigricante maculatæ; alæ posticæ diaphanæ.*

Male. Blackish. Head towards the mouth, pectus, and under side of the abdomen testaceous. Head full as broad as the prothorax; tip of the vertex elliptical, depressed; front erect, with four slight diverging keels. Eyes ferruginous, oval. Antennæ reddish. Prothorax with two tawny or yellowish patches on each side beyond the lateral keels, which diverge hindward and like the middle one are well defined Fore border and sides nearly straight; hind border slightly rounded. Prosternal spine slightly transverse, nearly cylindrical. Abdomen tawny, brown towards the tip. Hind femora blackish, testaceous beneath, much longer than the abdomen. Hind tibiæ blackish, with two testaceous bands near the base, a little shorter than the hind femora; spines black towards the tips. Fore wings cinereous, with many blackish spots. Hind wings pellucid; veins whitish on the hinder half, black towards the costa. Length of the body 13½ lines; expansion of the fore wings 26 lines.

Closely allied to C. ferrifer, which is distinguished from it by the two tawny stripes of the prothorax.

a. ——— ?

CALOPTENUS SPISSUS.

Mas. *Fuscus, robustus, subtus testaceus; caput strigis duabus lateralibus lanceolatis albis, fastigio depresso conico; antennæ fulvæ; prothorax subtiliter scaber, carinis tribus bene determinatis, strigis duabus obliquis albis, marginibus lateralibus albidis nigro punctatis, margine postico producto rotundato; prosterni spina crassa; femora postica intus nigra, extus nigro notata, supra nigro bifasciata; alæ anticæ diaphanæ, plagis maculisque plurimis nigricantibus nigro-venosis; alæ posticæ basi roseo-venosæ.*

Male. Brown, stout, testaceous beneath. Head testaceous towards the mouth; a white lanceolate streak proceeding on each side from behind the eye towards the mouth; tip of the vertex depressed, conical. Antennæ tawny. Prothorax finely scabrous, with three well-defined keels and with an oblique white streak on each side near the border, which is whitish with black points; hind border elongated, forming a rounded angle. Prosternal spine thick. Abdomen testaceous, with brownish interrupted dorsal bands. Hind femora much longer than the abdomen, mottled with black on the outer side, mostly black on the inner side, with two black bands above. Hind tibiæ much shorter than the hind femora; spines with black tips. Wings pellucid. Fore wings with numerous blackish black-veined patches, spots and dots. Hind wings with rosy veins at the base. Length of the body 15 lines; expansion of the fore wings 34 lines.

a. ———?

Page 712.

CALOPTENUS OBLITERANS.

b. Corea. Presented by Capt. Sir E. Belcher.

Page 714.

OMMATOLAMPIS MEXICANA.

O. (Proctolabus) Mexicana, *Sauss. Rev. Zool.* xi. 393.

Mexico.

OMMATOLAMPIS CINCTA.

cincta, *Sauss. Rev. Zool.* xi. 394.

Brazil.

OMMATOLAMPIS COLIBRI.

O. (Ophthalmolampis) Colibri, *Sauss. Rev. Zool.* xi. 394.

Guiana.

OMMATOLAMPIS YERSINI.

Yersini, *Sauss. Rev. Zool.* xi. 394.

North America?

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PLATYPHYMA CALOPTENOIDES.

Paracaloptenus Caloptenoides, *Brunner*.

a. Corfu. From M. Brunner de Wattenwyl's collection.
b, *c*. Epirus. From M. Brunner de Wattenwyl's collection.

PLATYPHYMA MEXICANA.

Mexicanum, *Watt. Verh. Zool. Bot. Ges. Wien*. xi. 224.

Orizaba.

Page 717.

PODISMA FRIGIDA.

a—*c*. Swiss Alps. From M. Brunner de Wattenwyl's collection.

PODISMA ALPINA.

a, *b*. Austrian Alps. From M. Brunner de Wattenwyl's collection.
c—*e*. *Var*. collina. Austria. From M. Brunner de Wattenwyl's collection.
f, *g*. *Var*. collina. South Hungary. From M. Brunner de Wattenwyl's collection.

PODISMA PEDESTRIS.

a—*c*. Austria. From M. Brunner de Wattenwyl's collection.
d, *e*. Swiss Alps. From M. Brunner de Wattenwyl's collection.
f. *Var*. alis longis. Carinthia. From M. Brunner de Wattenwyl's collection.

PODISMA MENDAX.

Parapodisma (Pezotettix) mendax, *Brunner*.

a, *b*. Tergestum. From M. Brunner de Wattenwyl's collection.
c, *d*. South Hungary. From M. Brunner de Wattenwyl's collection.

PODISMA SCHMIDTII.

Parapodisma (Pezotettix) Schmidtii, *Brunner*.

a—*c*. South Hungary. From M. Brunner de Wattenwyl's collection.

PODISMA SALAMANDRA.

Parapodisma (Pezotettix) Salamandra, *Brunner*.

a—*c*. Carniolia. From M. Brunner de Wattenwyl's collection.

PODISMA GABONENSIS.

Acridium Gabonense, *Brisout*, *A. S. E. F.* 2*me Ser*. ix. *Bull*. lxvii.

Gabon.

PODISMA SYRIACA.

Pezotettix Syriaca, *Watt. Verh. Zool. Bot. Ges. Wien*. xi. 225.

Syria.

Page 718.

PODISMA GLACIALIS.

Pezotettix glacialis, *Scudder*, *Bost. Journ. Nat. Hist.* vii. 630, pl. 14, f. 9.
White Mountains.

PODISMA MEGACEPHALA.

Pezotettix megacephala, *Watt. Verh. Zool. Bot. Ges. Wien.* xi. 226.
Venezuela.

PODISMA MANCA.

Pezotettix manca, *Smith*, *Proc. Portl. Soc. Nat. Hist.* i. 2, 149.
Maine.

Genus STENOCROBYLUS.

Stenocrobylus, *Gerst. Arch. Naturg.* xxxv. 219.

STENOCROBYLUS CERVINUS.

cervinus, *Gerst. Arch. Naturg.* xxxv. 220.
Zanzibar.

Page 720.

BATRACHOPUS CINERASCENS.

cinerascens, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

BATRACHOPUS OBESUS.

obesus, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

BATRACHOPUS? BICARINATUS.

bicarinatus, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.
Chili.

Genus IXALIDIUM.

Ixalidium, *Gerst. Arch. Naturg.* xxxv. 220.

IXALIDIUM HŒMATOSCELIS.

hœmatoscelis, *Gerst. Arch. Naturg.* xxxv. 220.
Zanzibar.

Page 725.

PACHYTYLUS DETERMINATUS.

Fœm. *Testaceus; caput et prothorax vittis duabus flavescentibus lineisque quatuor nigris posticis, lineis interioribus longioribus subangulatis; caput lineis quatuor exterioribus nigricantibus, fastigio scabro subcarinato submarginato, carinis duabus frontalibus parallelis antice abbreviatis; prothorax plagis duabus nigris angulatis postice incisis, carina aquali bene determinata, margine postico producto acute angulato; alæ anticæ cinereæ, fasciis indeterminatis plagisque exterioribus plurimis fuscis; alæ posticæ basi subflavescentes, fascia media lituraque apicali fuscis.*

Female. Testaceous. Head and prothorax on each side with a yellowish stripe and with two black lines which extend from the hind border of the eye of the former to the disk of the latter, where the inner pair are slightly angular and extend much beyond the outer pair. Head on each side with two more exterior blackish lines; tip of the vertex scabrous, with a very slight keel and a very slight elevated border on each side; front with two slight parallel keels, which do not extend to the face. Prothorax on each side with an angular black patch, which is deeply notched on the hind side; keel well defined, continuous, of equal height; hind border elongated, acutely angular. Wings cinereous. Fore wings with several irregular brown bands, which towards the tips are merely represented by small patches. Hind wings with a yellow tinge at the base and along the interior border, with a brown middle band and with a brown apical mark. Length of the body 23 lines; expansion of the fore wings 40 lines.

This species has comparatively short wings; the keel of the prothorax is rather higher than that of P. cinerascens, and the hind border is much more elongated and angular. The Abyssinian specimen may be a distinct species; the prothorax is more elongated and angular.

a. Cape. Presented by Major-Gen. Hardwicke.
b. South Africa. Presented by R. Trimen, Esq.
c. Natal. From M. Gueinzius' collection.
d. Abyssinia. Presented by J. C. Bowring, Esq.
e. ——— ? Presented by Sir J. Liddell.

Var. Mas. *Viridis; caput fronte punctata, verticis carina facieque ferrugineis, clypei disco albido; prothorax carina bene determinata vittis duabus fasciaque lata ferrugineis, margine postico valde producto acute angulato; abdomen ferrugineum; femora postica intus nigro biseriatim punctata; alæ anticæ cinereæ, vitta postica antemedia viridi, venis ferrugineis ex parte albidis; alæ posticæ diaphanæ, fascia nigricante abbreviata.*

Male. Green. Vertex with a slight ferruginous keel; its tip angular on each side, narrower in front, not depressed; front punctured, with four slight keels, which diverge a little towards the face; outer keels curved inward; face and clypeus ferruginous, the latter with a whitish disk. Antennæ testaceous, piceous towards the tips. Prothorax finely punctured, with a ferruginous, continuous, rather high, very slightly rounded keel; on each side a ferruginous stripe, which is connected with a broad ferruginous band, the latter interrupted in the disk; hind part much elongated, acutely angular. Abdomen ferruginous. Hind femora longer than the body, with two rows of black points on the inner side. Hind tibiæ a little shorter than the hind femora, their spines with black tips. Fore wings cinereous, a little shorter than the body, with a green stripe which is near the hind border and extends from the base to half the length; veins ferruginous, partly whitish. Hind wings pellucid, with a short broad blackish band which extends from the inner angle to the disk; veins black, pale yellow between the band and the base. Length of the body 22 lines; expansion of the fore wings 50 lines.

f. Sierra Leone. Presented by the Rev. D. F. Morgan.

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Pyrgodera armata.

Pachytylus armatus, p. 724.

a, *b*. Asia Minor. From M. Brunner de Wattenwyl's collection.

Page 725.

Acrotylus Insubricus.

Œdipoda Insubrica, p. 725. vel. spec. nova.

a. Algeria. From M. Brunner de Wattenwyl's collection.

Acrotylus patruelis.

Œdipoda Insubrica, p. 725.

a. South Tyrol. From M. Brunner de Wattenwyl's collection.

Acrotylus longipes.

Œdipoda longipes, p. 726.

a. European Turkey. From M. Brunner de Wattenwyl's collection.

Page 726.

Sphingonotus cærulans.

Œdipoda cærulans, p. 726.

a, *b*. *Var.* meridionalis. Asia Minor. From M. Brunner de Wattenwyl's collection.

Page 729.

Psophus stridulus.

Œdipoda stridula, p. 729.

Œdipoda Wagneri.

Wagneri, *Eversm. Bull. Mosc.* 1859, i. 133.

Ural region.

Page 734.

Œdipoda Haitensis.

For a—d. St. Domingo, *read a.* St. Domingo.

Œdipoda tentatrix.

Mas. *Testacea aut fulva; fastigium breve, marginatum; prothorax brevis, subsellatus, subcarinatus, postice latescens; femora postica nigro bifasciata; tibiæ posticæ rufescentes, basi flavæ nigricante*

unifasciatæ ; alæ anticæ fusco confertim notatæ, apices versus oblique cinereæ ; alæ posticæ roseæ, dimidio apicali oblique diaphano, fascia intermedia fusca antice latiore et abbreviata.

Not Sumichrasti nor transtrigata.

Male. Testaceous or tawny. Head small ; fastigium short, with two parallel keels which are continuous with the inner pair of the four slight diverging keels of the front. Eyes elliptical. Prothorax short, subsellate, widening hindward, with a very slight keel and with slight transverse impressed lines, occasionally with some small black marks. Hind femora with two irregular black bands. Hind tibiæ reddish, as long as the hind femora, pale yellow at the base, near which there is a blackish band. Fore wings with many partly confused brown marks; apical part obliquely pale cinereous, with some brown points. Hind wings rose-colour; apical half obliquely pellucid; an irregular oblique brown band, which tapers hindward and is much abbreviated towards the costa. Length of the body 7—12 lines; expansion of the fore wings 17—24 lines.

a—c. Oajaca, Mexico. From M. Sallé's collection.

Page 736.

ŒDIPODA BIVENOSA.

bivenosa, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 339.

Ecuador.

ŒDIPODA FLAVIPENNIS.

flavipennis, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.

Chili.

ŒDIPODA CHLORIS.

chloris, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.

Chili.

ŒDIPODA IRRORATA.

irrorata, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.

Chili.

ŒDIPODA ATACAMENSIS.

Atacamensis, *Philippi*, *Reise durch die Wüste Atacama*, 173.

Atacama.

Page 738.

ŒDIPODA STRIGATA.

a, *b*. *Var.* aurantiaca. Syria. From M. Brunner de Wattenwyl's collection.

ŒDIPODA TUBERCULATA.

a. South Russia. From M. Brunner de Wattenwyl's collection.

Œdipoda Beckeri.

Beckeri, *Brunner*, *MS.*

a. South Russia. From M. Brunner de Wattenwyl's collection.

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Œdipoda Galinieri.

Galinieri, *Reiche et Fairm. Ferret et Galinier*, *Voy. Abyss.* iii. 432. *Zool.* pl. 28, f. 3.

Abyssinia.

Œdipoda carinata.

carinata, *Scudder*, *Trans. Amer. Ent. Soc.* ii. 306.

Iowa.

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Œdipoda granulosa.

Mas et fœm. *Cinerea, robusta, tuberculata; caput breve, fastigio transverso antice rotundato; oculi prominuli; prothorax subcarinatus, margine postico producto acute angulato; abdomen nigro fasciatum; femora postica extus tuberculata nonnunquam nigro notata; tibiæ posticæ nonnunquam intus cyaneæ; alæ anticæ nonnunquam nigro plagiatæ et maculatæ; alæ posticæ diaphanæ.*

Male and female. Cinereous, stout. Head and prothorax tuberculate. Head short; tip of the vertex flat, transverse, rounded in front; front erect, with very slight keels. Eyes brown, prominent, nearly round. Prothorax with a slight keel and with three well-defined transverse impressed lines; hind part elongated, acutely angular. Abdomen with black bands. Middle femora slightly tuberculate. Hind femora tuberculate and occasionally with black marks on the outer side. Hind tibiæ occasionally blue on the inner side, shorter than the hind femora. Fore wings occasionally with many black patches and spots. Hind wings pellucid. Length of the body 18—23 lines; expansion of the fore wings 30—40 lines.

a. Beloochistan. Presented by Dr. Leith.

Ctypohippus gratiosus.

Œdipoda fasciata, *var.* gratiosa, p. 727.

a, *b*. Asia Minor. From M. Brunner de Wattenwyl's collection.

Ctypohippus cærulescens.

Œdipoda fasciata, *var.* cærulescens, p. 727.

Ctypohippus variabilis.

a, *b*. *Var.* rhodoptilus, p. 727. Caucasus. From M. Brunner de Wattenwyl's collection.

c, *d*. *Var.* subcæruleipennis, p. 727. Austria. From M. Brunner de Wattenwyl's collection.

Ctypohippus fuscocinctus.

Œdipoda fuscocincta, p. 737.

a. Sicily. From M. Brunner de Wattenwyl's collection.

Ctypohippus Charpentieri.

Charpentieri, *Fieb*.

a. Syria. From M. Brunner de Wattenwyl's collection.

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Stauronotus brevicollis.

brevicollis *Eversm*.

a—c. Austria. From M. Brunner de Wattenwyl's collection.

Stauronotus Genei.

Genei, *Oesk*.

a, *b*. Venice. From M. Brunner de Wattenwyl's collection.

Stauronotus flavicosta.

a, *b*. Austria. From M. Brunner de Wattenwyl's collection.

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Stenobothrus jucundus.

a. Andalusia. From M. Brunner de Wattenwyl's collection.

Stenobothrus declivus.

Var. alis longis.

a, *b*. Asia Minor. From M. Brunner de Wattenwyl's collection.

Stenobothrus pratorum.

Var. montana.

a—c. Swiss Alps. From M. Brunner de Wattenwyl's collection.

Var. meridionalis.

d. South Hungary. From M. Brunner de Wattenwyl's collection.

Stenobothrus crassipes.

a, *b*. Austria. From M. Brunner de Wattenwyl's collection.

Stenobothrus lineatus.

Var. Alpina.

a—c. Tyrolese Alps. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS VAGANS.

Var. meridionalis.

a, *b*. Dalmatia. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS APRICARIUS.

a—c. Austria. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS PULLUS.

a, *b*. Transylvania. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS MELANOPTERUS.

a—d. Carinthia. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS PETRÆUS.

a—c. Carniolia. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS MINIATUS.

a. Balkan. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS BICOLOR.

bicolor, *Charp*—variabilis, p., *Fieb.*

a—d. Austria. From M. Brunner de Wattenwyl's collection.
e, *f*. Sicily. From M. Brunner de Wattenwyl's collection.
g, *h*. Dalmatia. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS BIGUTTULUS.

biguttulus, *Burm.*—variabilis, p., *Fieb.*

a—d. Austria. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS NIGROMACULATUS.

nigromaculatus, *Herr. Sch.*

a—c. Austria. From M. Brunner de Wattenwyl's collection.

STENOBOTHRUS GENICULATUS.

geniculatus, *Eversm.*

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

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STENOBOTHRUS HYALINUS.

hyalinus, *Yersin*, *A. S. E. F.* 4*me Ser.* iii. 285, pl. 7.

Spain.

STENOBOTHRUS RAYMONDI.

Raymondi, *Yersin*, *A. S. E. F.* 4*me Ser.* iii.

Hyères.

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STENOBOTHRUS AMÆNUS.

Œdipoda amæna, *Brisout*, *A. S. E. F.* 2*me Ser.* ix. *Bull.* lxi. *Lucas*, *A. S. E. F.* 2*me Ser.* ix. 379. cruentata, *Lucas* non *Brullé*.

Algeria.

STENOBOTHRUS SIMPLEX.

simplex, *Eversm. Bull. Mosc.* 1859, i. 133.

Ural region.

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STENOBOTHRUS NOBILIS.

Mas. *Pallide viridis; caput et prothorax fusco indeterminate bivittata; fastigium subrotundum, transverse arcuatim sulcatum; frons subpunctata; antennæ fuscæ, basi testaceæ; prothorax carina dorsali bene determinata, carinis duabus lateralibus angulatis indeterminatis, margine postico valde rotundato; femora postica intus nigro uniplagiata, subtus rufa; tibiæ posticæ rufæ, basi flavæ, apice nigricantes; alæ anticæ subdiaphanæ, plagis maculisque nonnullis e venis fuscis aut nigricantibus, punctis subcostalibus nigricantibus.*

Male. Pale green. Head and prothorax with two irregular brown more or less interrupted stripes, which widen hindward. Head subconical; tip of the vertex nearly round, with a curved transverse furrow; front thinly punctured, with four very slight diverging keels. Eyes tawny, pear-shaped. Antennæ brown, testaceous towards the base. Prothorax with a well-defined middle keel and with two slight lateral keels, which are angular and diverge hindward; fore border and sides nearly straight; hind border much rounded. Hind femora a little longer than the abdomen, with a black patch on the inner side near the base; under side red. Hind tibiæ red, nearly as long as the hind femora, pale yellow on each side at the base, blackish on each side at the tips; spines black, except at the base. Fore wings nearly pellucid, with a discal stripe of spots and patches which are formed by brown or blackish veins; a subcostal line of transversely elongated brown or blackish points. Hind wings pellucid; veins black, pale yellow at the base and along the interior border. Length of the body 16 lines; expansion of the fore wings 33 lines.

a, *b*. Oajaca, Mexico. From M. Sallé's collection.

STENOBOTHRUS MUNDUS.

Mas. *Fulvus, subtus testaceus; fastigium conicum; prothorax carinis lateralibus subflexis, margine postico rotundato; tibiæ posticæ albidæ; alæ anticæ subdiaphanæ, fusco guttatæ, basi fuscescentes; alæ posticæ diaphanæ.*

Male. Tawny, testaceous beneath, rather slender. Tip of the vertex depressed, conical; front erect, with four diverging and very slight keels. Eyes tawny, elliptical. Prothorax widening slightly hindward, with three well-defined keels; lateral keels converging slightly from the fore border to one-third of the length, diverging much thence to the hind border, which is rounded. Abdomen testaceous. Hind femora as long as the abdomen. Hind tibiæ whitish, shorter than the hind femora; spines black, minute. Fore wings nearly pellucid, irregularly brownish towards the base and with several brown dots of various size. Hind wings pellucid; veins greenish white, black towards the tips. Length of the body 9 lines; expansion of the fore wings 18 lines.

a. Bombay. Presented by Dr. Leith.

Stenobothrus decisus.

Fœm. *Fuscescens, subtus testaceus; caput et prothorax testaceo univittata; fastigium fere rotundum; antennæ rufescentes; prothorax carinis lateralibus valde flexis, margine postico valde rotundato; femora postica supra fuscescentiu; tibiæ posticæ rufæ, basi flavæ; alæ anticæ pallide cinereæ, spatio basali fuscescente, maculis discalibus magnis subquadratis guttisque subcostalibus fuscis; alæ posticæ diaphanæ.*

Female. Brownish, rather slender. Head and prothorax with a testaceous stripe, which widens slightly from the hind side of the tip of the vertex to the hind border of the prothorax. Tip of the vertex depressed, nearly round; front erect, with four diverging and very slight keels. Eyes tawny, nearly elliptical. Antennæ reddish. Prothorax with three distinct keels; lateral keels converging from the fore border to one-third of the length, diverging much from thence to the hind border, which is much rounded. Pectus, abdomen beneath and legs testaceous. Hind femora as long as the abdomen, brownish above except towards the tips. Hind tibiæ red, yellow towards the base, shorter than the hind femora; spines black, minute. Fore wings pale cinereous, irregularly brownish towards the base, with a discal stripe of large subquadrate brown spots and with several subcostal brown dots. Hind wings pellucid; veins black, whitish towards the base. Length of the body 10½ lines; expansion of the fore wings 20 lines.

The lateral keels of the prothorax are more abruptly angular than those of S. mundus.

a. Bombay. Presented by Dr. Leith.

Stenobothrus apicalis.

Mas. *Fuscus, subtus testaceus; caput prothorace paullo latius, fastigio triangulari, fronte testacea subquadricarinata; antennæ testaceæ, apices versus fuscæ; prothorax carinis lateralibus valde flexis, margine postico producto subangulato; femora postica fusco subvittata; alæ anticæ subdiaphanæ, maculis discalibus vittaque posteriore fuscis, costa valde rotundata; alæ posticæ diaphanæ, apice fuscæ.*

Male. Brown, testaceous beneath. Head a little broader than the prothorax; tip of the vertex depressed, triangular; front testaceous, with four diverging and very slight keels. Eyes nearly elliptical. Antennæ testaceous, brown towards the tips. Prothorax with three distinct testaceous keels; lateral keels converging from the fore border to one-third of the length, diverging much from thence to the hind border, which is elongated and slightly angular. Abdomen testaceous, brown above towards the base. Hind femora a little longer than the abdomen, slightly striped with brown on both sides. Hind tibiæ shorter than the hind femora; spines black. Fore wings nearly pellucid, with a row of brown spots in the disk and with a posterior brown stripe; costa much rounded, except towards the tip. Hind wings pellucid, brown towards the tips; veins black, whitish towards the base and along the interior border. Length of the body 5½ lines; expansion of the fore wings 9 lines.

a. Bombay. Presented by Dr. Leith.

Stenobothrus epacramoides.

Fœm. *Fulvus, subtus testaceus; caput et prothorax fusco bivittata; fastigium planum, conicum; antennæ apices versus fuscæ; prothorax vittis duabus exterioribus nigricantibus abbreviatis, carinis lateralibus albidis flexis; alæ anticæ cinereæ, fusco guttatæ; alæ posticæ diaphanæ.*

Female. Tawny, testaceous beneath. Head and prothorax with a brown stripe on each side. Tip of the vertex flat, conical; front oblique, with four slight diverging keels. Eyes fusiform. Antennæ brown towards the tips. Prothorax with three slight keels; the lateral keels whitish, bent inward, included in the brown stripes; two exterior irregular and abbreviated blackish stripes; sides straight; hind border rounded. Abdomen and legs testaceous. Fore wings cinereous, with pale brown dots, which mostly form two stripes and are darker towards the base. Hind wings pellucid; veins whitish, black towards the tips. Length of the body 9 lines; expansion of the fore wings 18 lines.

a. Bombay. Presented by Dr. Leith.

Stenobothrus turbatus.

Mas. *Testaceus; caput et prothorax fusco late bivittata; fastigium excavatum, triangulare; prothoracis vittæ strigas duas obliquas testaceas carinasque duas albidas includentes; femora postica fusco nebulosa; tibiæ posticæ fuscæ; alæ anticæ striga discoidali nigra; alæ posticæ cinereæ, apices versus nigricantes.*

Male. Testaceous. Head with a broad brown stripe on each side; tip of the vertex depressed, triangular, minute; front slightly oblique, with four very slight diverging keels. Eyes tawny, nearly elliptical. Prothorax with two very broad brown stripes, divided by the middle keel, each including a testaceous oblique streak and an angular whitish lateral keel, which are connected on the hind part; sides straight; hind border much rounded. Hind femora slightly mottled with brown; hind tibiæ mostly brown. Fore wings with an irregular black streak in the disk. Hind

wings cinereous, blackish towards the tips; veins black, whitish towards the base and along the interior border. Length of the body 7 lines; expansion of the fore wings 11 lines.

a. Bombay. Presented by Dr. Leith.

STENOBOTHRUS LUTEIPES.

Mas. *Fulvus, subtus testaceus; caput et prothorax flavo bivittata; caput fusco octovittatum, fastigio excavato fere rotundo; prothorax flavescente biplagiatus; pedes lutei, femoribus posticis apice nigris; alæ anticæ diaphanæ, basi fusco flavoque strigatæ.*

Male. Tawny, testaceous beneath. Head and prothorax with a yellow stripe. Head with four brown stripes on each side; tip of the vertex depressed, nearly round; front oblique, with four strongly-marked slightly diverging keels. Eyes ferruginous, large, somewhat pear-shaped. Prothorax with a large yellowish patch on each side and with three slight keels; lateral keels slightly bent inward; sides slightly rounded; hind border much rounded in the middle. Legs luteous; tips of the hind femora, hind knees and tips of the spines of the hind tibiæ black. Wings pellucid. Fore wings streaked with brown and with pale yellow towards the base. Length of the body 8½ lines; expansion of the fore wings 12 lines.

a. Bombay. Presented by Dr. Leith.

STENOBOTHRUS STRIGULATUS.

Fœm. *Fulvus, subtus testaceus; caput et prothorax fusco late bivittata; fastigium planum, conicum; prothoracis carinæ tres parallelæ, vittæ duæ exteriores fuscæ; alæ anticæ cinereæ, striga discali nigricante cinereo notata; alæ posticæ diaphanæ, apices versus fuscescentes.*

Female. Tawny, testaceous beneath. Head and prothorax with a broad dark brown stripe on each side. Tip of the vertex flat, conical; front oblique, with four slight keels; inner keels parallel; two slight longitudinal ridges on each side between them and the outer keels, which are slightly diverging. Prothorax with three distinct parallel keels; a brown stripe along each side, of which the hind part is rounded. Abdomen and legs testaceous. Fore wings cinereous, with a blackish discal streak, which includes two or three pale cinereous marks. Hind wings pellucid, brownish towards the tips; veins black. Length of the body 9 lines; expansion of the fore wings 16 lines.

a. Bombay. Presented by Dr. Leith.

STENOBOTHRUS SIMPLEX.

Mas. *Fulvus, subtus testaceus; caput et prothorax fusco late bivittata; fastigium conicum, excavatum; prothorax vittis duabus exterioribus testaceis, carinis lateralibus subobliquis; alæ anticæ cinereæ, vitta discali e maculis indeterminatis fuscescentibus; alæ posticæ diaphanæ.*

Male. Tawny, testaceous beneath. Head and prothorax with a broad brown stripe on each side. Tip of the vertex depressed, conical; front

oblique, with four slight keels, the inner keels parallel. Eyes ferruginous, elliptical. Antennæ tawny. Prothorax with two testaceous stripes beyond the brown stripes; keels very slight: lateral keels diverging slightly hindward; sides slightly rounded; hind border more rounded. Abdomen and legs testaceous. Fore wings cinereous, with a stripe of indistinct brownish spots in the disk. Hind wings pellucid. Length of the body 7 lines; expansion of the fore wings 12 lines.

a. Bombay. Presented by Dr. Leith.

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Stenobothrus inclytus.

Fœm. *Testaceus; caput et prothorax fusco late bivittata; caput subproductum, fastigio subpentagonali, fronte obliqua; prothorax subtricarinatus, carinis lateralibus subarcuatis, margine postico rotundato; tibiæ posticæ rufæ; alæ posticæ diaphanæ.*

Female. Testaceous. Head and prothorax with two broad brown stripes, which proceed from the hind borders of the eyes to the hind borders of the prothorax. Head slightly elongate; tip of the vertex flat, subpentagonal; front oblique, with four slight diverging keels. Eyes brown, somewhat pear-shaped. Prothorax with three slight keels, the lateral keels slightly curved inward; hind border rounded. Hind femora as long as the abdomen. Hind tibiæ red, nearly as long as the hind femora; spines with black tips. Hind wings pellucid. Length of the body 12 lines; expansion of the fore wings 16 lines.

a. ——— ?

Stenobothrus rectus.

Testaceus, lævis; fastigium conicum; frons obliqua, octo-subcarinata; prothorax carinis tribus parallelis, margine postico subangulato; alæ anticæ cinereæ, vitta discali abbreviata e plagis fuscis; alæ posticæ fuscæ.

Testaceous, smooth. Tip of the vertex flat, conical; front oblique, with eight slight keels. Eyes ferruginous, somewhat pear-shaped. Prothorax with three slight parallel keels; hind border slightly angular. Abdomen mutilated in the specimen described. Hind tibiæ a little shorter than the hind femora; spines with black tips. Fore wings cinereous, with a short stripe of brown patches in the disk. Hind wings brown. Length of the body 7 lines; expansion of the fore wings 15 lines.

a. ——— ?

Stenobothrus subrufescens.

Mas. *Fulvus, subtus testaceus; caput subtricarinatum, fastigio conico transverse angulatim carinato, fronte punctata vix obliqua; prothorax postice rufescens, carinis lateralibus arcuatis, plagis duabus exterioribus nigricantibus, margine postico subrotundato; alæ anticæ fusco plagiatæ, postice rufo univittatæ; alæ posticæ diaphanæ, apices versus nigricantes.*

Male. Tawny, testaceous beneath. Head higher than the prothorax; vertex with three slight keels; tip conical, with a transverse angular keel; front punctured, hardly oblique, with four slight diverging keels. Eyes pear-shaped. Prothorax reddish towards the tip, with three well-defined keels; lateral keels curved inward; an exterior blackish patch on each side; hind border slightly rounded. Hind femora full as long as the abdomen. Hind tibiæ a little shorter than the hind femora, their spines with black tips. Fore wings with a red stripe along the hind border; a few brown patches in the disk. Hind wings limpid, blackish along the costa and towards the tips. Length of the body 8 lines; expansion of the fore wings 14 lines.

a. ——— ?

Stenóbothrus úmbrifer.

Mas. *Fulvus, subtus testaceus; vertex et prothorax nigra, subtricarinata, aspere punctata; frons perobliqua; prothorax carinis lateralibus arcuatis, carinulis duabus posticis indeterminatis, marginé postico rotundato; alæ anticæ e plagis maculisque nigricantibus bivittatæ; alæ posticæ diaphanæ, apices versus nigricantes.*

Male. Tawny, testaceous beneath. Head above and disk of the prothorax black, roughly punctured. Head with three slight keels, the lateral pair diverging on the sides of the round tip; front very oblique, with four slight diverging keels. Prothorax with three slight keels, the lateral pair curved inward; an indistinct and incomplete intermediate keel on each side; hind border rounded. Hind femora longer than the abdomen. Hind tibiæ a little shorter than the hind femora, their spines with black tips. Fore wings with two stripes of blackish patches and spots. Hind wings pellucid, blackish along the costa and towards the tips. Length of the body 7 lines; expansion of the fore wings 11½ lines.

a. ——— ?

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Epacromia strepens.

strepens, *Latr.*

a—c. Dalmatia. From M. Brunner de Wattenwyl's collection.

Epacromia Lucasii.

Lucasii, *Brunner, MS.*

a, b. Algeria. From M. Brunner de Wattenwyl's collection.

Epacromia selecta.

Mas. *Viridis aut ferrugineo-viridis; caput breve, fastigio conico, fronte vix sulcata; oculi prominuli; antennæ nigricantes; prothorax brevis, non carinatus, margine postico nonnunquam nigro; pedes postici nonnunquam nigro bifasciati; alæ anticæ diaphanæ, nigricante plus minusve variæ.*

Male. Grass-green. Head short; tip of the vertex depressed, conical; front erect, hardly keeled. Eyes brown, large, prominent, nearly round. Antennæ very slender, blackish except at the base. Prothorax short, not keeled; transverse impressed lines slight; hind border black, much rounded. Abdomen lanceolate, blackish towards the base above. Hind femora as long as the abdomen, with an irregular black subapical band. Hind tibiæ a little shorter than the hind femora, with a blackish band near the base; spines black. Wings pellucid. Fore wings blackish towards the base, with a blackish patch in the middle and with a few small exterior blackish marks; veins greenish white in the pale part; costa much rounded near the base. Hind wings with whitish veins; a few of them black. *Var.* β.— Head and prothorax ferruginous-green. Prothorax not black towards the tip. Hind femora and hind tibiæ wholly green. Fore wings wholly pellucid, excepting an interrupted blackish streak in the disk. Length of the body 7—8 lines; expansion of the fore wings 15—17 lines.

a. Santarem. From Mr. Bates' collection.
b. Ega. From Mr. Bates' collection.

Epacromia collecta.

Mas. *Fuscescens, subtus testacea; caput breve, fastigio conico, fronte quadricarinata; oculi prominuli; prothorax brevis, subtricarinatus, carinis lateralibus postice deflexis; alæ anticæ pallide cinereæ, spatio basali liturisque nonnullis fuscis; alæ posticæ diaphanæ, basi flavæ.*

Male. Brownish. Head short; tip of the vertex conical, rather large, much depressed; front erect, with four well-defined slightly diverging keels. Eyes prominent, nearly elliptical. Antennæ very slender, tawny towards the base. Prothorax short, with three slight keels and with well-defined transverse impressed lines; lateral keels diverging much hindward; hind border rounded. Pectus, abdomen and legs testaceous. Hind femora a little longer than the abdomen. Hind tibiæ much shorter than the hind femora; spines minute, with black tips. Fore wings pale cinereous, irregularly brown towards the base and with a few irregular brown marks of various size in the disk. Hind wings pellucid, yellow and with yellow veins towards the base; veins elsewhere black. Length of the body 7½ lines; expansion of the fore wings 15 lines.

This and the preceding species differ much in structure from each other and from the typical form of Epacromia, and may be considered as the representatives of two new genera.

a. St. Jago.

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Epacromia varia.

Var. Fœm. *Fulva, subtus testacea; fastigium planum, subtriangulare; antennæ apices versus nigræ; prothorax subtricarinatus, margine postico rotundato subproducto; abdomen basi carinatum; femora postica nigro notata; alæ anticæ fere diaphanæ, plagis sex magnis subconnexis guttisque sex obscure fuscis; alæ posticæ cinereæ, apice obscuriores.*

Female. Tawny, testaceous beneath. Tip of the vertex flat, large, nearly triangular; front erect; inner keels strongly marked, diverging towards the face. Antennæ slender, black towards the tips, as long as the head and the prothorax together. Prothorax with three slight keels; lateral keels nearly straight, diverging from the fore border to the hind border, which is rounded and slightly elongated. Abdomen keeled above towards the base. Hind femora with a row of small black marks above and beneath. Spines of the hind tibiæ with black tips. Fore wings nearly pellucid, with six large partly connected dark brown patches; first and second patches larger than the others and more irregular; a row of six dark brown dots in front of the second patch. Hind wings cinereous, darker at the tips and along the exterior border; veins black, white at the base and along the interior border. Length of the body 12 lines; expansion of the fore wings 26 lines.

Yunan. In Dr. Anderson's collection.

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STETHEOPHYMA GROSSA.

Gryllus flavipes, *Gmel. Syst. Nat.* iv. 2088. *Donov. Brit. Ins.* xi. pl. 391—Locusta flavipes, *Steph. Ill. Brit. Ent. Mand.* vi. 21.

b—e. England. From Mr. Stephens' collection.
f, g. England.

STETHEOPHYMA TURCOMANA.

Œdipoda Truchmana, *Fisch. de W. Nouv. Mém. Soc. Imp. Nat. Mosc.* viii. 313, pl. 13, f. 2—Stauronotus? Turcomanus, *Fisch. Orth. Eur.* 356—Chortippus Turcomanus, *Fieb. Lotos*, iii. 101; iv. 180—Stetheophyma turcomanum, *Watt. Disq. Orth.* ii. 20.

Greece. Turcomania.

a. Syria. From M. Brunner de Wattenwyl's collection.

STETHEOPHYMA LABIATA.

a. Greece. From M. Brunner de Wattenwyl's collection.

STETHEOPHYMA BREVIPENNIS.

brevipennis, *Brunner.*

a. Dalmatia. From M. Brunner de Wattenwyl's collection.

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PARACINEMA BISIGNATA.

Œdipoda virescens, p. 737.

PARAPLEURUS TYPUS.

a, b. Austria. From M. Brunner de Wattenwyl's collection.

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GOMPHOCERUS DESERTICOLA.

deserticola, *Eversm. Bull. Mosc.* 1859, i. 133.
Ural region.

GOMPHOCERUS ANTENNATUS.

antennatus, *Fieb.*
a, *b*. S. Russia. From M. Brunner de Wattenwyl's collection.

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CHRYSOCHRAON DISPAR.

Var. smilacea.
a. Germany. From M. Brunner de Wattenwyl's collection.
Var. alis anticis longis.
b. Austria. From M. Brunner de Wattenwyl's collection.

CHRYSOCHRAON BRACHYPTERUS.

a. Austria. From M. Brunner de Wattenwyl's collection.
Var. platyptera, *Oesk.*
b. Austria. From M. Brunner de Wattenwyl's collection.
Var. alpina.
c, *d*. Swiss Alps. From M. Brunner de Wattenwyl's collection.

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CHRYSOCHRAON? ABBREVIATUM.

C.? abbreviatum, *Scudder*, *Bost. Soc. Nat. Hist.* xii. 397.
Between Quito and Napo.

CHRYSOCHRAON DASYCNEMIS.

dasycnemis, *Gerst. Arch. Naturg.* XXXV. 217.
Zanzibar.

CHRYSOCHRAON SEMICARINATUS.

semicarinatus, *Gerst. Arch. Naturg.* XXXV. 218.
Zanzibar.

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OXYCORYPHUS FRACTUS.

fractus, *Fieb. MS.*
a. Syria. From M. Brunner de Wattenwyl's collection.

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SPHENARIUM PULCHRIPES.

pulchripes, *Gerst. Arch. Naturg.* XXXV. 217.
Zanzibar.

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MASTAX INNOTATA.

Mas. *Ferruginea, gracilis; caput abrupte ascendens, fastigio conico bilobato, facie antice fulva; antennæ nigræ, basi fulvæ; prothorax brevis, sellatus, subcarinatus, nigricante bilituratus; alæ anticæ cinereæ, maculis duabus diaphanis, 1a costali, 2a postica exteriore; alæ posticæ cinereo hyalinæ.*

Male. Ferruginous, slender. Head elongate, obliquely but abruptly ascending; tip of the vertex conical, prominent, slightly bilobed; front long, oblique, with four well-defined keels; inner keels converging towards the face; outer keels diverging towards the face; clypeus and fore part of the face tawny. Antennæ black, short, slender, tawny towards the base. Eyes elliptical, prominent. Prothorax short, sellate, widening hindward, with a slight keel; a blackish mark on each side in front of the transverse impressed line. Hind femora as long as the abdomen. Hind tibiæ slender, piceous, a little longer than the hind femora; spines small. Fore wings narrow, cinereous, with two pellucid marks near the tips, the mark on the hind border larger and more remote from the tip than the other, which is costal. Hind wings cinereous, hyaline, with a blackish costal line; veins black. Length of the body 10 lines; expansion of the fore wings 20 lines.

Yunan. In Dr. Anderson's collection.

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CHROTOGONUS LUGUBRIS.

a. Egypt. From M. Brunner de Wattenwyl's collection.

CHROTOGONUS TRACHYPTERUS.

a. South Hindostan. Presented by M. J. Walhouse, Esq.

CHROTOGONUS LUGUBRIS.

a, *b*. ——— ?

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THRINCHUS MURICATUS.

a. South Russia. From M. Brunner de Wattenwyl's collection.

GLYPHANUS OBTUSUS.

a, *b*. Greece. From M. Brunner de Wattenwyl's collection.

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BRACHYPEPLUS MAGNUS.

magnus, *Girard, Nat. Hist. Red River, Louisiana*.

Louisiana.

Genus GLYPHANUS.

Glyphanus, *Fieb. Lotos*, iii. 129.

GLYPHANUS OBTUSUS.

obtusus, *Fieb. Lotos*, iii. 129. *Watt. Disq. Orth.* ii. 19, pl. 15, f. 20.

Greece.

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PHYLLOCHOREIA HIPPISCUS.

Choroetypus hippiscus, *Gerst. Arch. Natury.* xxxv. 218.

Zanzibar.

Genus GRAEA.

Graea, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi. 44.

1. GRAEA HORRIDA.

horrida, *Philippi*, *Zeitschr. Gesammt. Naturwiss.* xxi.

La Plata.

Genus BUFONACRIS.

Mas. Corpus longi-ovatum, apterum, latissimum, fere planum. Caput læve, prothorace multo angustius; fastigium brevissimum; frons subtricarinata. Oculi subprominuli, fere rotundi. Palpi breves. Antennæ breves, graciles, filiformes. Prothorax subtuberculatus, sulco transverso bene determinato. Pectus latissimum. Abdomen triangulare, prothorace non longius. Pedes robusti, breviusculi.

Male. Body elongate-oval, wingless, very broad, nearly flat. Head short, smooth, much narrower than the prothorax; tip of the vertex transverse, very short; front erect, with four very slight keels; the inner keels diverging and again converging between the sockets of the antennæ, which are low-seated. Eyes nearly round, rather prominent. Palpi short. Antennæ short, slender, filiform. Prothorax slightly tuberculate, with a strongly-marked transverse furrow. Pectus very broad. Abdomen triangular, not longer than the prothorax. Legs stout, rather short; hind femora a little longer than the abdomen; hind tibiæ shorter than the hind femora, with two rows of stout spines.

This genus seems to be allied to Graea, *Philippi*.

1. BUFONACRIS TERRESTRIS.

Mas. *Sordide cinereo-fulva.* Var.—*Thorax et abdominis dorsum nigra.*

Male. Dull cinereous-tawny, paler beneath. Spines of the hind tibiæ with black tips. *Var.*—Thorax and dorsum of the abdomen black. Length of the body 12—14 lines.

a—*c*. Possession Bay, Straits of Magellan. Presented by the Lords of the Admiralty.

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TETTIX SUBULATA.

a. *Var.* pallida. Austria. From M. Brunner de Wattenwyl's collection.
b. *Var.* binotata. Austria. From M. Brunner de Wattenwyl's collection.
c. *Var.* dorsalis. Tyrolese Alps. From M. Brunner de Wattenwyl's collection.
d. *Var.* strigata. Austria. From M. Brunner de Wattenwyl's collection.

TETTIX DEPRESSA.

a, *b*. Greece. From M. Brunner de Wattenwyl's collection.
c, *d*. *Var.* alis longis. Caucasus. From M. Brunner de Wattenwyl's collection.

TETTIX BIPUNCTATA.

a, *b*. *Var.* diluta. Austria. From M. Brunner de Wattenwyl's collection.
c. *Var.* notata. Austria. From M. Brunner de Wattenwyl's collection.

TETTIX MERIDIONALIS.

subulata, *var.?*

a. Austria. From M. Brunner de Wattenwyl's collection.

Page 814.

TETTIX FEMORATA.

femorata, *Scudder*, *Trans. Amer. Ent. Soc.* ii. 305.

Maryland.

Page 822.

TETTIX CONDYLOPS.

condylops, *Gerst. Arch. Naturg.* xxxv. 221.

Zanzibar.

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TETTIX LINEOSA.

Mas. *Fulva, subtus testacea; prothorax inermis, abdomen longe superans, strigis quatuor latis subtriangularibus lineolisque nonnullis piceis; femora postica extus piceo bivittata; tibiæ posticæ testaceæ, femoribus multo breviores; alæ posticæ cinereæ, abdomen longe superantes.*

Male. Tawny, testaceous beneath. Head and prothorax with the usual keel. Antennæ very slender. Prothorax unarmed, with two broad somewhat triangular piceous streaks and with a few irregular little piceous lines on each side; hind part lanceolate, extending for half its length beyond the tip of the abdomen; sides rounded. Hind femora with two irregular piceous stripes on the outer side; hind tibiæ testaceous, much shorter than the hind femora. Hind wings cinereous, extending somewhat beyond the tip of the prothorax. Length of the body 6 lines.

Bombay. In Dr. Power's collection.

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HYMENOTES HUMILIS.

humilis, *Gerst. Arch. Naturg.* xxxv. 220.

Zanzibar.

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ON THE GEOGRAPHICAL DISTRIBUTION OF DERMAPTERA.

M. Brunner de Wattenwyl, in his Essay on the Geographical Distribution of the Blattariæ, has divided the globe into these sixteen regions:—

1. North and Central Europe.
2. South Europe.
3. North Africa, Mediterranean coast.
4. West Africa, coast of the Atlantic.
5. South and East Africa, coast of the Indian Ocean.
6. West Asia, Asia Minor, Arabia, Persia.
7. North Asia, Siberia.
8. Central Asia, China.
9. Hindostan, with Ceylon.
10. East Indies not in British possession, Islands or Australasia.
11. Australia.
12. Polynesia, New Zealand.
13. South America, towards the Pacific.
14. South America, towards the Atlantic.
15. Central America.
16. North America.

Nine of these, the Nos. 1, 2, 3, 6, 7, 8, 9, 15, 16, are northward of the equator; two, Nos. 11, 12, are south of the equator; and five, Nos. 4, 5, 10, 13, 14, are on both sides of the equator. Some small islands of Polynesia north of the equator are exceptions.

The regions which the genera inhabit are indicated by the numbers after the names of the genera in the following list:—

BLATTARIÆ.

Fam. 1. Blaberidæ.

Blabera 13—16
Monochoda 14
Monastria 14
Petasodes 14
Libisoca 15

Fam. 2. Polyphagidæ.

Polyphaga 2, 3, 5, 6, 8, 9, 14, 15
Latindia 14
Tarraga 14
Sisapona 14
Laxta 11
Erganla 10

Fam. 3. Panesthidæ.
Panesthia 8—11

Fam. 4. Planeticidæ.
Planetica 9, 10
Archiblatta 10

Fam. 5. Panchloridæ.
Panchlora 2, 4, 5, 9, 10, 13—16
Nauphœta 4, 5, 10, 14, 15
Proscratea 5, 13—15
Culama 14

Fam. 6. Zetoboridæ.
Zetobora 5, 10, 11, 13—15
Schizopilia 14
Catara 10
Aptera, 5

Fam. 7. Hormeticidæ.
Brachycola 5, 14
Hormetica 13, 14
Homalodemas 5
Gromphadorhina 5
Dasyposoma 15, 16

Fam. 8. Diplopteridæ.
Prosoplecta 10
Plectoptera 15
Diploptera 10, 11

Fam. 9. Corydidæ.
Corydia 9, 10
Enthyrrapha 5, 12, 14, 15
Melestora 9, 14
Holocompsa 3, 5, 10, 15
Hypercompsa 14

Fam. 10. Hypnormidæ.
Hypnorma 14
Stenoblatta 14

Fam. 11. Chorisoneuridæ.
Oxyhaloa 4, 5
Chorisoneura 14, 15
Areolaria 10

Fam. 12. Blattidæ.
Phoraspis 14, 15
Phlebenotum 9—11
Lupparia 10
Riatia 14
Epilampra 4, 5, 8—11, 14, 15
Homalopteryx 10, 14
Pseudomops 9, 10, 14, 15
Ellipsidium 8—11, 14
Aphlebia 2, 3
Ceratinoptera 14, 15
Blatta 1—16
Pseudophyllodromia 10
Temnopteryx 5, 10, 14, 16
Ischnoptera 4, 5, 9—11, 13—16
Periplaneta 4, 5, 8—16
Euryzosteria 5
Nyctibora 10, 14, 15
Paratropes 14, 15
Polyzosteria 2—5, 8, 9, 11, 13—15
Perisphæria 5, 8—11, 14
Deropeltis 9, 10
Blepharodera 5, 10
Derocalymna 5, 10
Tivia 5
Opisthoplatia 8—11, 14
Loboptera 1, 9
Parasphæria 14

Fam. 13. Anaplectidæ.
Anaplecta 14

SALTATORIA.

Fam. 1. Gryllidæ.
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Gryllotalpa 1—16
Cylindrodes 11
Tridactylus 2, 9, 10, 15, 16
Rhipipteryx 14, 15
Hemimerus 4
Myrmecophila 1—3
Acheta 9
Brachytrypes 2, 4, 5, 8—11
Gryllus 1, 16
Platyxyphus 10
Mogoplistes 2, 16
Arachnocephalus 2
Tafalisca 15
Carsidava 14
Nessa 5, 14
Landreva 9
Nemobius 1, 2, 9, 11, 14—16
Argizala 14

Hapithus 16
Orocharis 14—16
Itara 9
Madasumma 9
Lobeda 5
Eneoptera 9, 10, 14, 15
Phyllopalpus 5, 9, 14—16
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Scleropterus 4, 5, 10, 12
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Nisitra 10
Œcanthus 2, 4, 5, 9—12, 16
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Luzara 9, 14
Phalangopsis 2, 4, 5, 9, 10, 14—16
Cycloptilum 16
Omebius 5, 9, 10
Xabea 10
Platyblemmus 2, 3, 9
Paroccanthus 15
Phyllosceytus 14, 15
Paragryllus 15
Homœogryllus 4, 5
Euscyrtus 5, 9
Hirpinus 5
Ectatoderus 5
Meloimorpha 9
Arachnocephalus 2
Condylomera 10
Microgryllacris 8, 11
Scepastus 10

Fam. 2. Stenopelmatidæ.

Cerberodon 14
Monocerophora 14
Anostostoma 5, 11
Gnathoclita 13—15
Hemideina 11, 12
Licola 10
Gryllacris 5, 8—11, 14, 15
Dolichochœta 13
Larnaca 10
Stenopelmatus 5, 11, 13, 15, 16
Lezina 3
Penalva 11
Noia 9
Lencica 14
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Rhaphidophora 9, 10
Hadenœcus 2, 11, 16
Ceuthophilus 12? 11, 16
Schœuobates 15
Udeopsylla 16
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Camptonotus 16
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Licodia 15
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Lucina 14, 10?
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Hetrodes 3—6
Cosmoderus 4
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Callimenus 2
Arachnacris 10
Callimenellus 8
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Onconotus 2, 6, 7
Pycnogaster 2, 3
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Odontura 1—3, 6, 14
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Thamnotrizon 1, 3, 6, 7
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Soria 14
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Narea 11
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Fam. 8. Scaphuridæ.

Scaphura 14
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Zacatula 10
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Sexava 10
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Scelymena 8—10
Amorphopus 14
Cladonotus 4, 5, 8—10
Tripetalocera 10
Paulinia 14
Choriphyllum 15
Hymenotes 4, 10
Ophiotettix 10

The Dermaptera-fauna may be noticed with reference to the comparatively recent natural changes on the surface of the earth. When the latter part of the glacial period commenced and the arctic climate began to retreat from the equator towards the poles, the insect-life in the tropical regions was gradually developed or widened, and sent forth branches to the north and to the south in the track of vegetation. In proportion as the present inter-tropical Insect-fauna is more known it exhibits a greater abundance of forms that correspond to those of temperate countries, and this number will probably be much increased when the insects of the mountains of low latitudes are more fully observed. The hot countries, on the contrary, have many groups that are peculiarly their own and have no representatives elsewhere, and the fauna of each higher latitude may be considered as a branch or colony from the fauna of the lower latitude, whence it migrated according as conditions of temperature and arrangements of land and sea and vegetable distribution allowed its advance. The

great winter epoch and the ensuing time and the contingencies are represented in a slight degree by the alternations of the seasons, by birds of passage, and by the northward migrations of some southern insects during a hot season. The Dermaptera generally are more limited to warm regions than are the other orders of insects, which also more or less precede them in time of yearly appearance. Omitting all notice of the sinking of former continents and of the rising of present continents and islands, a few words may be said with regard to the way in which ramifications from the Dermaptera in tropical regions have converged towards the poles. Some tribes appear to have left their first habitation entirely as the increasing heat and dryness deprived them of circumstances essential to their existence, and some seem to have increased in numbers and variety after their migration. The advance to the north from the equatorial regions may be included in four principal divisions: 1st, through China to Japan; 2nd, from the East Indies along the Himalaya and other mountain ranges to West Asia and to Europe; 3rd, from Central Africa to North Africa and to Europe; 4th, from Equatorial America to North America. There are many instances of one kind of insect being a native both of Japan and of Europe, or of Europe and of the Mountains of Hindostan, and the close resemblance between numerous insects of North America and of North Europe is well known, and indicates the former existence of an intervening continent. However, large numbers of insects in North America and in Europe differ widely from each other, those of the former having been introduced from South America and those of the latter from the more southern parts of the old world. The regions on the south of the equator form three principal divisions: 1st, that of South America, where insect-life is most abundant; 2nd, Australia and the numerous neighbouring islands; 3rd., South Africa, where the insects are least numerous.

The sixteen regions before mentioned are noticed as follows, omitting in each succeeding region the genera before enumerated:—

1st. North Europe.

Blatta	Thamnotrizon	Pachytylus
Periplaneta	Decticus	Œdipoda
Loboptera	Xiphidium	Stenobothrus
Gryllotalpa	Meconema	Epacromia
Myrmecophila	Locusta	Stetheophyma
Gryllus	Phaneroptera	Parapleurus
Nemobius	Acridium	Gomphocerus
Odontura	Caloptenus	Chrysochraon
Gampsocleis	Podisma	Tettix

Blatta is spread over all the regions, and the species of tropical countries are numerous. Periplaneta is not a native of Europe and has not been recorded as such in North Africa, nor in West Asia nor in North Asia, but P. orientalis, the common cockroach or the "black beetle," establishes itself in the houses of most English towns, and is domiciled in North America. The species of Loboptera are few and small; it has been recorded also as a native of Hindostan. Gryllotalpa, the mole cricket, inhabits all the

sixteen regions, and the species do not exhibit much difference of structure. Myrmecophila is of small size and inhabits ants' nests, and is therefore not likely to be observed except where insects are much studied; it occurs in South Europe and in North Africa. Gryllus is found in all the regions; the chirp of G. domesticus, the house cricket, is well known, and multitudes of G. campestris, the field cricket, occur in several parts of Europe. Nemobius is allied to Gryllus, inhabits woods, and is found also in South Europe, in Hindostan, in Australia, in South America towards the Atlantic, in Central America and in North America. Odontura inhabits South Europe, North Africa, West Asia and South America towards the Atlantic. Gampsocleis inhabits China. Thamnotrizon inhabits South Europe, North Africa, West Asia and North Asia. Decticus inhabits South Europe, North Africa, West Asia, North Asia, China, Hindostan, South America towards the Atlantic, Central America and North America. Xiphidium inhabits South Europe, North Africa, West Africa, South Africa, China, Hindostan, Australasia, Australia and New Zealand. Meconema inhabits South Europe and Hindostan. Locusta inhabits South Europe, North Africa, North Asia, Hindostan, Australasia, Australia, New Zealand and South America towards the Pacific. Phaneroptera inhabits South Europe, North Africa, West Africa, South Africa, China, Hindostan, Australasia, Australia, South America on both sides, Central America and North America. These eight genera are long-horned grasshoppers and mostly dwell in herbage; Xiphidium and Meconema are found on trees and shrubs. Acridium occurs in all the regions: this genus and Pachytylus include the migratory locusts, which are scarce and generally appear as stragglers in the western part of North Europe. Caloptenus and Œdipoda inhabit all the regions, but are much more characteristic of South Europe than of North Europe: the latter genus is distinguished by its bright red or blue or yellow hind wings. Podisma is recorded as a native of South Europe, of West Africa, of South Africa, of West Asia, of both sides of South America, of Central America and of North America. Pachytylus has not been recorded as a native of the Pacific side of S. America, nor of Central America, but inhabits all the other regions. Stenobothrus and Tettix have not been discovered in Polynesia, but are found in all the other regions; most of the grasshoppers in England are Stenobothri. Epacromia inhabits South Europe, North Africa, West Africa, South Africa, West Asia, China, Hindostan, Australasia, Australia and New Zealand. Stetheophyma occurs in South Europe and in North America; it is remarkable that S. variegata is nearly peculiar to the Swiss Alps and to North America. Gomphocerus inhabits South Europe, North Asia, China, Hindostan, South America towards the Atlantic and North America. Chrysochraon inhabits South Europe, and perhaps also South America towards the Atlantic.

2nd. South Europe.

Polyphaga	Brachytrypes	Platyblemmus
Panchlora	Mogoplistes	Arachnocephalus
Aphlebia	Œcanthus	Hadenœcus
Polyzosteria	Trigonidium	Callimenus
Tridactylus	Phalangopsis	Onconotus

Pycnogaster	Saga	Heteracris
Barbitistes	Conocephalus	Platyphyma
Ephippiger	Tryxalis	Stauronotus
Cyrtaspis	Pyrgomorpha	Paracinema
Thyreonotus	Opomala	Oxycoryphus
Orphania	Porthetis	Thrinchus
Rhacocleis	Cuculligera	Glyphanus

In South Europe, as compared to the first region, the genera of this order are much more numerous, as if the advance from the tropical regions had been partly arrested here, and the aspect of the Mediterranean shore in South France, where swarms of Dermaptera spring from the ground with a noise like the crackling of wood or of straw on fire, sufficiently show that the species chiefly dwell in warm districts.

Polyphaga inhabits North Africa, South Africa, West Asia, China, Hindostan, South America towards the Atlantic and Central America; the European form (Heterogamia) has some characters which distinguish it from the American form (Homeogamia). Panchlora is found in West Africa, in South Africa, in Hindostan, in Australasia, in both sides of South America, in Central America and in North America; it has probably been imported into Europe, for some of the species, like those of Periplaneta, have the faculty of adapting themselves to artificial circumstances and are generally distributed in the world. Aphlebia inhabits North Africa. Polyzosteria inhabits North Africa, West Africa, South Africa, China, Hindostan, Australia, South America on both sides, Central America and North America; some species mimic Coleopterous larvæ in form and in colour. Tridactylus burrows like the mole cricket, and inhabits Hindostan, Australasia, Central America and South America. Brachytrypes is known only in Sicily as a European genus, and occurs in West Africa, South Africa, China, Hindostan, Australasia and Australia, and one species, B. achatinus, is a native of all these regions. Mogoplistes inhabits North America. Œcanthus inhabits West Africa, South Africa, Hindostan, Australasia, Australia and New Zealand. Trigonidium inhabits Mauritius, Ceylon, Java and the Hawaiian Isles; it mimics some Coleopterous insects. Phalangopsis inhabits West Africa, South Africa, Hindostan, Australasia, South America towards the Atlantic, Central America and North America. Platyblemmus is found in North Africa and in Hindostan. Arachnocephalus is as yet only known in the Neapolitan district. Hadenœcus is North American and perhaps also Australian, and is one of the cave-insects, the dwellers in darkness; some of these insects have excessively long antennæ, whereby to feel far about them. Callimenus, Barbitistes, Cyrtaspis, Pterolepis, Orphania, Rhacocleis and Cuculligera are, as yet, peculiar to South Europe. Onconotus inhabits West Asia and North Asia. Pycnogaster inhabits North Africa. Ephippiger inhabits North Africa, West Asia and Australia. Thyreonotus inhabits South Africa and North America. Saga, in which the European Dermaptera attain their largest development, inhabits all the regions about the Mediterranean, also West Africa, South Africa, North Asia, Hindostan, Australia and the Sandwich Isles. Conocephalus is recorded in the preceding list from all the following regions, excepting West Asia, North Asia, Australia and South America towards the Pacific. Tryxalis inhabits North Africa, West Africa, South

Africa, West Asia, China, Hindostan, Australasia, Australia and the Sandwich Isles; the two European species are remarkable on account of their wide diffusion and their variation in colour. Pyrgomorpha inhabits North Africa, South Africa, Hindostan, Australasia, South America towards the Atlantic and North America. Opomala inhabits West Africa, South Africa, China, Hindostan, Australasia, Australia and South America towards the Atlantic. Porthetis inhabits North Africa. Heteracris appears in North Africa, in West Africa, in South Africa and in all the regions from China to Australia; it attains its largest dimensions in Hindostan, where it rivals the locusts in size. Platyphyma has been recorded in Central America. Stauronotus inhabits North Africa and North Asia. The only recorded species of Paracinema is a native of South Europe and of South Africa. Oxycoryphus inhabits North Africa, West Asia and Central America. Thrinchus inhabits North Africa and West Asia, and has been recorded from South America towards the Pacific. Glyphanus has not been mentioned as a native of any other region.

3rd. North Africa.

Holocompsæ	Acridoxena	Cyrtacanthacris
Lezina	Pœcilocera	Chrotogonus
Hetrodes	Dericorys	

The genera of North Africa are mostly similar to those of South Europe, with the exception of a few forms which appear also in West Africa and in South Africa. This region is often devastated by the locusts that invade it in myriads from the interior of Africa, and sometimes extend their ravages to South Europe. Holocompsa inhabits South Africa, Australasia and Central America. Lezina, Acridoxena and Dericorys have not been said to occur in any other region. Hetrodes inhabits all the coasts of Africa and also West Asia. Pœcilocera inhabits South Africa and Hindostan. Chrotogonus inhabits South Africa, Hindostan and Australia. Cyrtacanthacris, of which the numerous species are distinguished from those of Acridium by the oblique and curved prosternal spine, appears in Egypt and is plentiful in the following regions:—South Africa, China, Hindostan, Australasia, Australia, South America towards the Atlantic, Central America and North America.

4th. West Africa.

Nauphœta	Scleropterus	Mesops
Oxyhaloa	Homœogryllus	Phymateus
Epilampra	Palotta	Petasia
Ischnoptera	Pseudorhynchus	Tinaria
Hemimacris	Orophus	Cladonotus
Phœophilacris	Pseudophyllus	Hymenotes
Cosmoderus	Mecopoda	

The Dermaptera of this region are less known than those of many other regions, and the genera are probably much more numerous than they now appear to be. Nauphœta inhabits South Africa, Australasia, South America towards the Atlantic and Central America. Oxyhaloa

inhabits East Africa. Epilampra inhabits South Africa, China, Hindostan, Australasia, Australia, South America towards the Atlantic and Central America, and attains a very large size in some of the numerous species of the East Indian Archipelago. Ischnoptera inhabits South Africa, Hindostan, Australasia, Australia and all the regions of America. Scleropterus inhabits South Africa, Australasia and, New Zealand. Homœogryllus and Petasia inhabit South Africa; Hemimactis, Phœophilacris, Cosmoderus and Palotta are as yet unknown except in this region. Pseudorhynchus inhabits Australasia and Australia. Orophus inhabits South Africa, South America towards the Atlantic, Central America and North America. Pseudophyllus, indicating by its name the great resemblance of its fore wings to leaves, inhabits South Africa, China, Hindostan (where it attains a vast size) and Australasia. Orophus and Phylloptera also belong to the group with leaf-like fore wings. Mecopoda and Phymateus inhabit South Africa, Hindostan and Australasia. Mesops inhabits South Africa, Hindostan, Australasia, South America towards the Atlantic, and perhaps North America. Tinaria appears as yet to be peculiar to St. Helena. Cladonotus inhabits South Africa, China, Hindostan and Australasia. Hymenotes, remarkable by its resemblance to a dead leaf, inhabits Australasia.

5th. South Africa.

Proscratea	Ornebrus	Cymatomera
Zetobora	Euscyrtus	Legna
Aptera	Hirpinus	Amycus
Brachycola	Ectatoderus	Xiphocera
Homalodemas	Anostostoma	Akicera
Gromphadorhina	Gryllacris	Pamphagus
Euthyrrapha	Stenopelmatus	Nocarodes
Temnopteryx	Libanasa	Monachidium
Euryzosteria	Clonia	Catantops
Perisphæria	Horatosphaga	Eupropacris
Tivia	Debrona	Oxya
Nessa	Copiophora	Platacanthus
Lobeda	Ephippitytha	Pnorisa
Phyllopalpus	Phylloptera	Hemiacris
Podoscirtus	Aspidonotus	Morphacris
Zaora	Pomatonota	Pneumora
Laurepa	Strongyloderus	Cystocœlia

The genera of Dermaptera in South Africa appear to be very numerous. The same species of locusts that occasionally devastate North Africa are also destructive here. Proscratea inhabits Central America and both sides of South America. Zetobora inhabits Australasia, Australia and the three regions of America just mentioned. Aptera, Homalodemas, Gromphadorhina, Euryzosteria, Tivia, Lobeda, Podoscirtus, Ectatoderus, Hirpinus, Clonia, Horatosphaga, Debrona, Aspidonotus, Strongyloderus, Legna, Amycus, Akicera, Pamphagus, Nocarodes, Eupropacris, Pnorisa, Morphacris, Pneumora and Cystocœlia are peculiar to this region; the two last genera have a very remarkable and peculiar structure. Nessa and Brachycola inhabit South America towards the Atlantic. Euthyrrapha

inhabits Polynesia, South America towards the Atlantic and Central America; it has much likeness to a beetle. Temnopteryx inhabits Australasia, South America towards the Atlantic and Central America. Perisphæria inhabits China, Hindostan, Australasia and South America towards the Atlantic; some of the species have a remarkable resemblance to the genus Glomeris in the Myriapoda. Blepharodera and Derocalymna inhabit also Australasia. Phyllopalpus inhabits Hindostan, South America towards the Atlantic, Central America and North America; perhaps this genus should be made exclusively American by the removal of the African and Asiatic species from it. Platydactylus inhabits China, Hindostan, Australasia, South America towards the Atlantic and Central America. Zaora inhabits Australia and Central America; perhaps this genus should be transferred to the Ceuthophilidæ. Laurepa inhabits Australasia, Australia, New Zealand and Central America. Ornebius inhabits Hindostan and Australasia. Euscyrtus inhabits Hindostan. Anostostoma inhabits Australia, where it is of very great size. Gryllacris inhabits China, Hindostan, Australasia, Australia, South America towards the Atlantic and Central America; this is especially an Asiatic genus, perhaps the American species should be separated from it. Stenopelmatus inhabits Australia, South America towards the Pacific, Central America and North America. Libanasa inhabits New Zealand. Copiophora inhabits Central America and both sides of South America. Ephippitytha inhabits Hindostan and Australasia. Phylloptera inhabits West Asia, Hindostan, Australasia, South America towards the Atlantic, Central America and North America. It is doubtful whether Pomatonota inhabits Australasia. Xiphocera inhabits China, Hindostan, Australasia, Australia, South America towards the Atlantic, Central America and North America. Monachidium inhabits South America towards the Atlantic; this genus and Dericorys form a group, which is distinguished by the high keel of the thorax. Catantops inhabits China. Oxya inhabits China, Hindostan, Australasia, South America towards the Atlantic, Central America and North America. Platacanthus inhabits Australia. Trachypetra may be considered as a synonym of Batrachotettix, and inhabits Hindostan.

6th. West Asia, Asia Minor, Arabia and Persia.

This region is occasionally ravaged by the locust, Acridium peregrinum. Phlocerus inhabits the Caucasus. Bradyporus inhabits Siberia.

7th. North Asia, Siberia.

8th. Central Asia, China.

Panesthia	Callimenellus	Mastax
Ellipsidium	Lucera	Scelymena
Opisthoplatia	Natricia	
Microgryllacris	Trigonopteryx	

Panesthia inhabits Hindostan, Australasia and Australia; the species are black, of large size and live in wood. Ellipsidium and Opisthoplatia inhabit Hindostan, Australasia, Australia and South America towards the

Atlantic. Microgryllacris and Natricia inhabit Australia. Callimenellus and Lucera are of China. Trigonopteryx inhabits Australasia; the fore wings of this genus have a remarkable resemblance to dead chipped leaves. Mastax inhabits Australasia and South America towards the Atlantic. Scelymena inhabits Hindostan and Australasia; this is the only amphibious or semi-aquatic genus of Dermaptera; it dives readily and the hind tibiæ are furnished with a narrow membrane.

9th. Hindostan, with Ceylon.

Planetica	Luzara	Zulama
Corydia	Meloimorpha	Aprion
Melestora	Noia	Phyllophora
Phlebenotum	Rhaphidophora	Strongyloderus
Pseudomops	Letana	Sanaa
Deropeltis	Ladnea	Calanus
Acheta	Megalodon	Teratodes
Landreva	Ancylecha	Apalacris
Madasumma	Zulpha	Leptacris
Eneoptera	Molpa	Ceracris
Tarraga	Vetralla	Phyllochoreia
Phisis	Tedla	

This region includes many genera remarkable on account of their size or of their peculiar structure; it has been supposed from observations that there was a continent formerly extending from Ceylon to the islands of Australasia before the appearance of the southern part of Hindostan.

Planetica, Corydia, Deropeltis, Phisis, Rhaphidophora, Ancylecha, Tedla, Aprion and Phyllochoreia inhabit Australasia. Corydia and Deropeltis are distinguished by their resemblance to beetles. Rhaphidophora is of large size and probably inhabits caves. Phyllochoreia has an extraordinary likeness to a leaf. Melestora and Lazura inhabit South America towards the Atlantic. Phlebenotum and Phyllophora inhabit Australasia and Australia. Pseudomops and Eneoptera inhabit Australasia, South America towards the Atlantic and Central America; the species of the former genus have much beauty and elegance and resemble beetles. Acheta, Landreva, Itara, Madasumma, Tarraga, Meloimorpha, Noia, Letana, Megalodon, Zulpha, Molpa, Vetralla, Zumala, Strongyloderus, Sanaa, Atractomorpha, Calanus, Bactrophora, Teratodes, Apalacris, Liptacris and Ceracris only inhabit Hindostan: Acheta is an example of the greatest development of the cricket-tribe; Monticollis, the name of the only species of Teratodes, expresses its peculiar structure; Meloimorpha has much resemblance to a beetle. Steirodon inhabits Australasia and South America towards the Atlantic, and its species are some of the largest in the Saltatoria.

10th. Australasia, or Isles of the East Indies.

Ergaula	Areolaria	Nyctibora
Catara	Lupparia	Platyxyphus
Prosoplecta	Homalopteryx	Nisitra
Diploptera	Pseudophyllodromia	Xabea

Condylomera	Agræcia	Stenoxyphus
Scepastus	Hexacentrus	Opiptacris
Licola	Sanabria	Phlœoba
Larnaca	Leptoderes	Tripetalocera
Lesina	Zacatula	Ophiotettix
Arachnacris	Sexava	
Piura	Perena	

The following twenty-six genera have not been found elsewhere:—Ergaula, Catara, Prosoplecta, Areolaria, Lupparia, Pseudophyllodromia, Platyxyphus, Nisitra, Xabea, Condylomera, Scepastus, Licola, Larnaca, Lesina, Arachnacris, Piura, Sanabria, Leptoderes, Zacatula, Sexava, Perena, Stenoxyphus, Opiptacris, Phlœoba, Tripetalocera and Ophiotettix. Some of them have much singularity of structure. Xabea has a long slender prothorax and very broad fore wings. Condylomera and Scepastus have a great likeness to beetles; Dr. Gerstacker, the author of the latter genus, has mentioned its mimicry of a Pachyrhynchus. Ophiotettix differs in an extraordinary way from the rest of the Tettigidæ; the head and the antennæ are very long and the latter are clubbed.

Diploptera, Hexacentrus and Tegra inhabit Australia. Homalopteryx inhabits South America towards the Atlantic. Nyctibora inhabits South America towards the Atlantic and Central America. Agrœcia inhabits Australia, Polynesia and South America towards the Atlantic. Lucina? palliceps and Meroncidius? crenifolius, the one from Cambodia, the other from Borneo, probably belong to different genera.

11th. Australia.

Laxta	Requena	Tympanophora
Cylindrodes	Dexerra	Prochilus
Eurepa	Lanciana	Phasmodes
Salmania	Nicsara	Moraba
Hemideina	Secsiva	Tropinotus
Penalva	Tinzeda	Coryphistes
Acripeza	Narea	Petasida
Ochrida	Torbia	Urnisa
Metholce	Veria	

Laxta, Cylindrodes, Eurepa, Salmania, Penalva, Acripeza, Ochrida, Metholce, Requena, Dexena, Lanciana, Nicsara, Secsiva, Tinzeda, Narea, Torbia, Veria, Tympanophora, Prochilus, Phasmodes, Moraba, Coryphites, Petasida and Urnisa are peculiar to Australia. Cylindrodes has a very singular and larva-like appearance, and looks as if its metamorphose has been arrested, or as if it is a remnant of an earlier race. Prochilus and Phasmodes are widely different from all the other genera, and resemble the Phasmidæ. Hemideina inhabits New Zealand, the species are totally destitute of wings, and some of them dwell in caves. Tropinotus inhabits both sides of South America. Hyalopteryx is not an Australian genus; the species described as H. australis may be considered as forming a section of Stenobothrus.

12th. Polynesia, New Zealand.

Deinacrida	Ocica	Pseudophyllanax
Macropathus	Banza	Quilta

The few genera here mentioned show that there is a wide field for discovery in this region. Deinacrida and Macropathus inhabit New Zealand and are both very remarkable. Deinacrida and Pseudophyllanax excel almost all the other Saltatoria in size. Macropathus dwells in caves, half a mile within, and has excessively long antennæ. Pseudophyllanax inhabits the Isle of Pines. Ocica inhabits the Fiji Isles. Banza inhabits the Loochoo Isles. Quilta inhabits Keeling Isle. The species described as Ceuthophilus lanceolatus probably belongs to another genus.

The locust, Pachytylus cinerascens, occurs in the Sandwich Islands and is abundant in New Zealand, where it has a darker hue than it wears in Europe, or in Africa, or in Asia.

13th. South America towards the Pacific.

Blabera	Cratomalus	Astroma
Hormetica	Acanthacara	Conometopus
Gnathoclita	Cosmophyllum	Calacris
Delichochœta	Proscopia	Batrachopus
Servillea	Cephalocœma	Graea

The Blaberæ are the giants of the cockroach race and have been observed in all the regions of America, but are limited to the southern shore of North America. The Proscopidæ are a very extraordinary group; they have the shape of the Phasmidæ, with the exception of the head, which has some resemblance to that of Tryxalis. Hormetica, Gymnocera, Proscopia and Cephalocœma inhabit the other side of South America. Gnathoclita and Calacris inhabit the last-mentioned region and Central America. The other genera are peculiar to the Pacific side.

14th. South America towards the Atlanic.

Monachoda	Anaplecta	Exocephala
Monastria	Scapteriscus	Harpiphora
Petasodes	Rhipipteryx	Bucrates
Latinidia	Carsidava	Mackia
Tarraga	Argizala	Valna
Sisapona	Orocharis	Vellea
Culama	Lerneca	Sictuna
Schizopilia	Laranda	Viadana
Hypercompsa	Pilugis	Soria
Hypnorma	Phylloscyrtus	Topana
Stenoblatta	Cerberodon	Sagona
Chorisoneura	Monocerophora	Peneba
Phoraspis	Lencica	Microcentrum
Riatia	Lucina	Diplophyllus
Ceratinoptera	Moncheca	Lobophyllus
Parasphœria	Montesa	Pycnopalpa

Itarissa
Scaphura
Gymnocera
Platyphyllum
Thliboscelus
Tabaria
Planoploscelis
Apereisis
Anonistus
Clisis
Acanthodiphrus
Meroncidius
Diacanthodis
Acanthodis
Pterochroza
Cycloptera
Typophyllum
Omura
Oxyphyma?
Copiocera
Xiphophora
Rhomalea
Trybliophorus
Titanacris
Tropidacris
Lophacris
Diponthus
Eynisacris
Abracris
Chromacris
Agriacris
Syntomacris
Stenacris
Glaphyracris
Chariacris
Ommatolampis
Sinipta
Hyalopteryx
Ommexecha
Amorphopus
Paulinia
Bufonacris

This is the most plentiful region of insect-life, and has a very large and uninterrupted extent of forest-land about the equator.

Chorisoneura, Phoraspis, Ceratinoptera, Paratropes, Scapteriscus, Rhipipteryx, Orocharis, Moncheca, Valna, Diplophyllus, Titanacris, Lophacris, Ommatolampis and Tomonotus inhabit Central America. Orocharis, Microcentrum, Rhomalea and Chromacris inhabit Central America and North America. Stenacris inhabits North America. All the rest of the preceding genera exclusively inhabit the 14th region. Hypercompa, Hypnorma, Stenoblatta and Phoraspis have more or less the appearance of beetles. Tabaria and Planoploscelis are allied to the Rhapidophoridæ; the latter genus has an enormous size. Pterochroza and Cycloptera excel all other Saltatoria in the beauty of their wings. Titanacris, Tropidacris and Lophacris exceed all the other species of the locust-tribe in size and in the vivid colours of the hind wings; and of these three genera, Titanacris, by its largest size and by its purple hind wings, has the pre-eminence. Bufonacris is a strange-looking wingless genus, found near the Straits of Magellan, and corresponds to the South African genus Batrachotettix or Trachypetra.

Acridium sellatum, found by Darwin at Monte Video, has perhaps too much resemblance to A. peregrinum to be separated from it, but can hardly have been carried by the winds across the Atlantic. A. peregrinum frequently comes to Teneriffe and to Madeira from the coast of Africa, and has been taken 500 miles from land.

15th. Central America. Mexico and the West Indies.

Libisoca
Plectoptera
Dasyposoma
Tafalisca
Lebussa
Paroecanthus
Paragryllus
Schœnobates
Daihinia
Licodia
Insara
Disceratus
Petaloptera
Polyancistrus
Calamoptera
Achurana
Ichthydion
Machærocera
Propedetes
Pedies
Pegasidion
Tomonotus
Hippopedon
Sphenarium
Leprus
Dactylotum
Hippiscus
Choriphyllum

This last genus has a striking likeness to a withered leaf.

Dasyposoma, Daihinia and Tomonotus have been found in North America; all the rest are limited to Central America.

16th. North America.

Hapithus	Anabrus	Orchelimum
Cycloptilum	Orchesticus	Ephippigera
Udeopsylla	Cyphoderris	Polysarcus
Tropidischia	Neduba	Tragocephala
Camptonotus	Marsa	

The species of the four first of the above genera are mostly dwellers in caves. The European genera, Caloptenus, Œdipoda and Stenobothrus are well represented in North America.

ON THE ARRANGEMENT OF DERMAPTERA.

The name Dermaptera, given to these insects by De Geer, has the right of priority; they were afterwards called Orthoptera by Olivier.

Three large groups, represented by Forficula, Mantis and Phasma, are not included in this Catalogue.

Serville arranges the typical genera in the following order:—Forficula, Blatta, Mantis, Phasma, Gryllus, Locusta, Acridium.

Burmeister places them in the following series:—Blatta, Mantis, Phasma, Acridium, Locusta, Gryllus, and excludes Forficula, to which and to its relations he gives the name Dermaptera. Fischer de Waldheim also excludes Forficula, and places the others in the following order:—Blatta, Mantis, Phasma, Gryllus, Locusta, Acridium.

Fischer likewise removes Forficula (for which he adopts the name Labiduroidæ, *Duméril*), and arranges the rest in the following order, which he terms ascending:—Blatta, Mantis, Phasma, Gryllus, Locusta, Acridium. Scudder has noticed the various systems of authors who have written on the Dermaptera, and adds his reasons for arranging the typical genera in the following descending order, or in a series from the most highly organized to those which are lowest in the scale:—Gryllus, Locusta, Acridium, Phasma, Mantis, Blatta, Forficula. I prefer the system of Fischer, who considers Acridium to represent the highest group.

The following series of most of the European genera shows M. Brunner de Wattenwyl's arrangement of the order:—

Forficularia	Œdipoda	Locustodea	Rhacocleis
Blattaria	Pachytylus	Ephippiger	Drymadusa
Mantodea	Pyrgodera	Callimenus	Gampsocleis
Acridiodea	Cuculligera	Onconotus	Locusta
Tryxalis	Eremobia	Meconema	Saga
Oxycoryphus	Glyphanus	Orphania	Rhaphidophora
Chrysochraon	Chrotogonus	Odontura	Gryllodea
Stenobothrus	Pyrgomorpha	Barbitistes	Phalangopsis
Gomphocerus	Tettix	Phaneroptera	Œcanthus
Paracinema	Porthetis	Conocephalus	Nemobius
Parapleurus	Acridium	Xiphidium	Platyblemma
Stauronotus	Pezotettix	Decticus	Gryllus
Stetheophyma	Caloptenus	Platycleis	Gryllotalpa
Epacromia	Euprepocnemis	Psorodonotus	Tridactylus
Sphingonotus	Platyphyma	Thamnotrizon	Mogoplistes

In this series the proximity of Chrysochraon, Stenobothrus and some other genera to Tryxalis is an improvement on the arrangement adopted in this Catalogue.

The Phasma-tribe come between the Mantodea and the Acrididæ, and I believe that the Blattaria should be placed next the Gryllidæ, though there is no link between them, and the Forficularia are still more widely separated from the Blattaria, and especially by the peculiar abdominal appendage which is adapted to manipulate the wings. There is another missing link between the Forficularia and the Thrips-tribe, and a greater space between the Dermaptera and the Thysanura, to which the Ceuthophilidæ have an outward resemblance.

The tribes represented by Libellula, Ephemera and Tormes have been included in the Dermaptera by some authors, and other authors have supposed that the Dermaptera are connected with the Neuroptera by the genera Mantis and Mantispa.

POSTSCRIPT.

BLABERA FEMORATA.

femorata, *Scudder*, *Proc. Bost. Soc. Nat. Hist.* xii. 342.
Napo or Maranon.

BLABERA ARMIGERA.

armigera, *Scudder*, *Proc. Bost. Soc. Nat. Hist.* xii. 343.
Napo or Maranon.

ISCHNOPTERA HYALINA.

hyalina, *Scudder*, *Trans. Amer. Ent. Soc.* ii. 307.
Delaware.

Genus GYNOPELTIS.

Gynopeltis, *Gerst. Arch. Naturgesch.* xxxv. 208.
Allied to Heterogamia.

GYNOPELTIS PICTA.

picta, *Gerst. Arch. Naturgesch.* xxxv. 208.
Zanzibar.

CERATINOPTERA DIMIDIATA.

dimidiata, *Gerst. Arch. Naturgesch.* xxxv. 205.
Zanzibar.

BLATTA PALLIPES.

Phyllodromia pallipes, *Scudder*, *Proc. Bost. Soc. Nat. Hist.* xii. 342.
Napo or Maranon.

BLATTA BIMACULATA.

Phyllodromia bimaculata, *Gerst. Arch. Naturgesch.* xxxv. 206.
Zanzibar.

DEROCALYMNA PORCELLIS.

porcellis, *Gerst. Arch. Naturgesch.* xxxv. 207.
Zanzibar.

DEROCALYMNA LAMPYRINA.

lampyrina, *Gerst. Arch. Naturgesch.* xxxv. 207.
Zanzibar.

DEROCALYMNA CAPUCINA.

capucina, *Gerst. Arch. Naturgesch.* xxxv. 207.
Zanzibar.

GRYLLOTALPA DEBILIS.

debilis, *Gerst. Arch. Naturgesch.* XXXV. 211.
Zanzibar.

GRYLLUS PHYSOMERUS.

physomerus, *Gerst. Arch. Naturgesch.* XXXV. 211.
Zanzibar.

GRYLLUS PULCHRICEPS.

pulchriceps, *Gerst. Arch. Naturgesch.* XXXV. 212.
Zanzibar.

GRYLLUS XANTHONEURUS.

xanthoneurus, *Gerst. Arch. Naturgesch.* XXXV. 212.
Zanzibar.

GRYLLUS SCENICUS.

scenicus, *Gerst. Arch. Naturgesch.* XXXV. 212.
Zanzibar.

GRYLLUS LAQUEATUS.

laqueatus, *Gerst. Arch. Naturgesch.* XXXV. 212.
Zanzibar.

GRYLLUS DIADEMATUS.

diadematus, *Gerst. Arch. Naturgesch.* XXXV. 213.
Zanzibar.

GRYLLUS CONTAMINATUS.

contaminatus, *Gerst. Arch. Naturgesch.* XXXV. 213.
Zanzibar.

ERRATA.

Dermaptera Saltatoria, pt. 1, page 100. *For* TARRAGA *read* PROPHALANGOPSIS.

The name Tarraga is inadvertently chosen for a genus of Gryllidæ; it was previously used for a genus of Polyphagidæ.

Page 35.

For XIPHIDIUM ANTENNATUM *read* XIPHIDIUM ATTENUATUM.

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